

Electrical Merchandising

The Monthly Magazine of the Electrical Trade

June
1917

In This Issue:

Lining Up the
Industry and "What
It Means to YOU."

Money-Making
Summer Business for
the Contractor
How to Sell—
Lay Out—Estimate
Factory Lighting

Electricity and
July Fourth

The High Cost
of Slow Pay

Taking Contracts
on "Quality"

Locating the Store

Dollar-Getting Ideas for
Dealer Contractor
Jobber Salesman
Manufacturer

Price, 20c a Copy

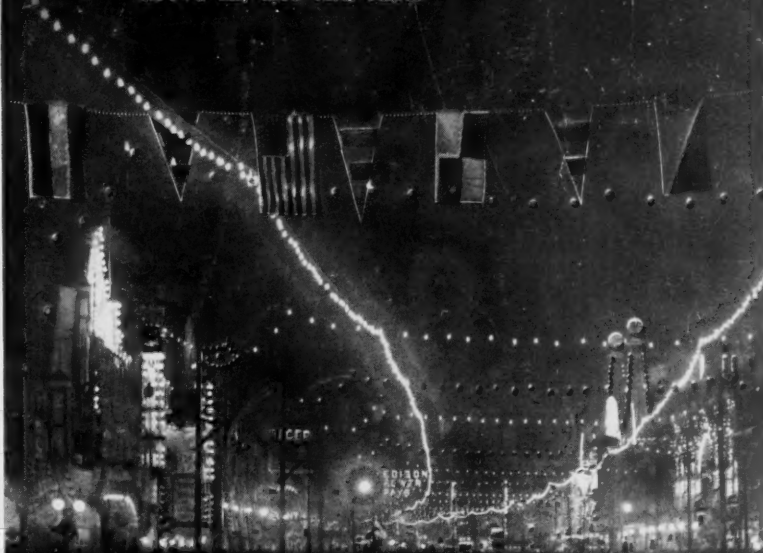
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This MUST be an Electrical 4th Minus Fireworks—Plus Electric Light

THE prohibition of fireworks this year is
the electrical man's opportunity.

By vigorous promotion *you* can popularize the
idea of an Electrical 4th in your community.

Mazda Lamps, Floodlights, Searchlights, Arc
Lamps can all contribute to a spectacular
Fourth—more brilliant, more festive, and
above all, safe and sane.



Coney Island



GENERAL ELECTRIC COMPANY
SCHENECTADY, N. Y.



This advertisement will appear on the inside back cover of the June 30th Saturday Evening Post—out the 28th. That's the week to do the bulk of your local fan advertising—newspaper, window, direct mail—to let your whole community know you are headquarters for G-E Fans.



The Low Cost of Coolness

If refreshing mountain breezes refuse to blow in at your window, make the breeze yourself.

Why pay the high cost of discomfort at home and in your business when the cost of coolness is so low?

Air is free. Air in motion is cooling. Little power is needed to set it in motion. Electric current supplies the power at the slightest cost.

About two cents a day to operate a G-E Fan (perhaps five cents on sizzling hot days).

With the snap of a switch—all the breeze you want—**when** you want it—**where** you want it.

Go to a leading electric shop and select the fan you want as to style, size and price.

The G-E trademark on a fan is your assurance that you have a fan that will work, year after year—silently, dependably, economically.

GENERAL ELECTRIC COMPANY

Schenectady, N. Y. Sales Offices and Distributors in Principal Cities
7100

G-E ELECTRIC FANS

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F. M. FEIKER, Editorial Director

O. H. CALDWELL, Editor

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ON THE WIRE WITH THE EDITORS



A War-Time Essential—"Get the Net"

SUCCESS means, in two words, *net profit*.

If you make a *net* profit on every sale, on every wiring job, on every repair, on every transaction great or small, you will make a success of your business in war time as in peace.

Getting a net profit requires two things—knowing absolutely your costs and having the determination to get your price. Cost finding is largely a matter of courage; nine men out of ten who figure their costs too low do so because they are afraid to look truth in the eye. Getting your price is a matter of salesmanship. As Charles M. Schwab says, in a recent address (printed on page 269, of this issue), "It is easy enough to sell goods if the price is made very low; the best salesman is one who sells the most goods at the best price."

ELECTRICAL MERCHANDISING is published for the sole purpose of aiding the trade to get the net. We decry the policy of the central stations which sell at cost, and point to those like the great United Gas & Electric Corporation, which has put all its many stores on a *net profit* basis. We decry the policy of the contractor who trims his "estimates" to get business, and we point to the many successful ones who refuse to be stampeded into the cut-price policy of ruin. The great work of "Bill" Goodwin on the Pacific Coast, told about in detail on page 258 of this issue, is simply the story of sound business methods applied in the trade.

The war is going to have this beneficial effect: It will *compel* the electrical trade and all trade, to operate upon a

net profit basis. It will eliminate the commercial weakling who does not know his costs, or who has not the gumption to get his price. It will make competition a matter of efficiency, not of price cutting. It will put a definite meaning into the war-time success slogan—"Get the Net!"

Going Over Instead of Through

EVENTS on the European battle fronts are proving that no modern army is stronger than its aeroplane division. The battle lines to-day, eye-witnesses tell us, are swarming with aeroplane bomb droppers and mine layers, as well as with observers spotting shell fire hits and studying the movements of the enemy. The side that has the most battle planes aloft can drive the other's fliers from the air—rendering the enemy virtually sightless, while continuing to watch his every move and checkmate it. At present so closely balanced is such control of the air that first one side and then the other is in the ascendancy. But the preponderance of aerial power that will win the war, America can supply, and that quickly. Our factories can build the thousands of aeroplanes needed, and we can train and send the aviators in three months, at most. If one aeroplane is worth a regiment of soldiers, as one general has put it, America by starting now, can put the aeronautic equivalent of an army of millions on the European fronts by fall. To win the war, the administration's half-billion-dollar aeroplane program is of first importance. It needs the support of every citizen who comprehends how vital aeroplane supremacy is to-day.

JAMES H. MCGRAW,
President

ARTHUR J. BALDWIN,
Vice-President and Treasurer

E. J. MEHREN,
Vice-President and General Manager

Secretary
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SAN FRANCISCO, Rialto Building

LONDON, ENG., 10 Norfolk Street, Strand

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Elsewhere, \$3.00. Single copy, 20c. When change of address is required both old and new addresses must be given. Notice must be received by the fifth of the month before the change takes place. Of This Number, 16,000 Copies Are Issued.

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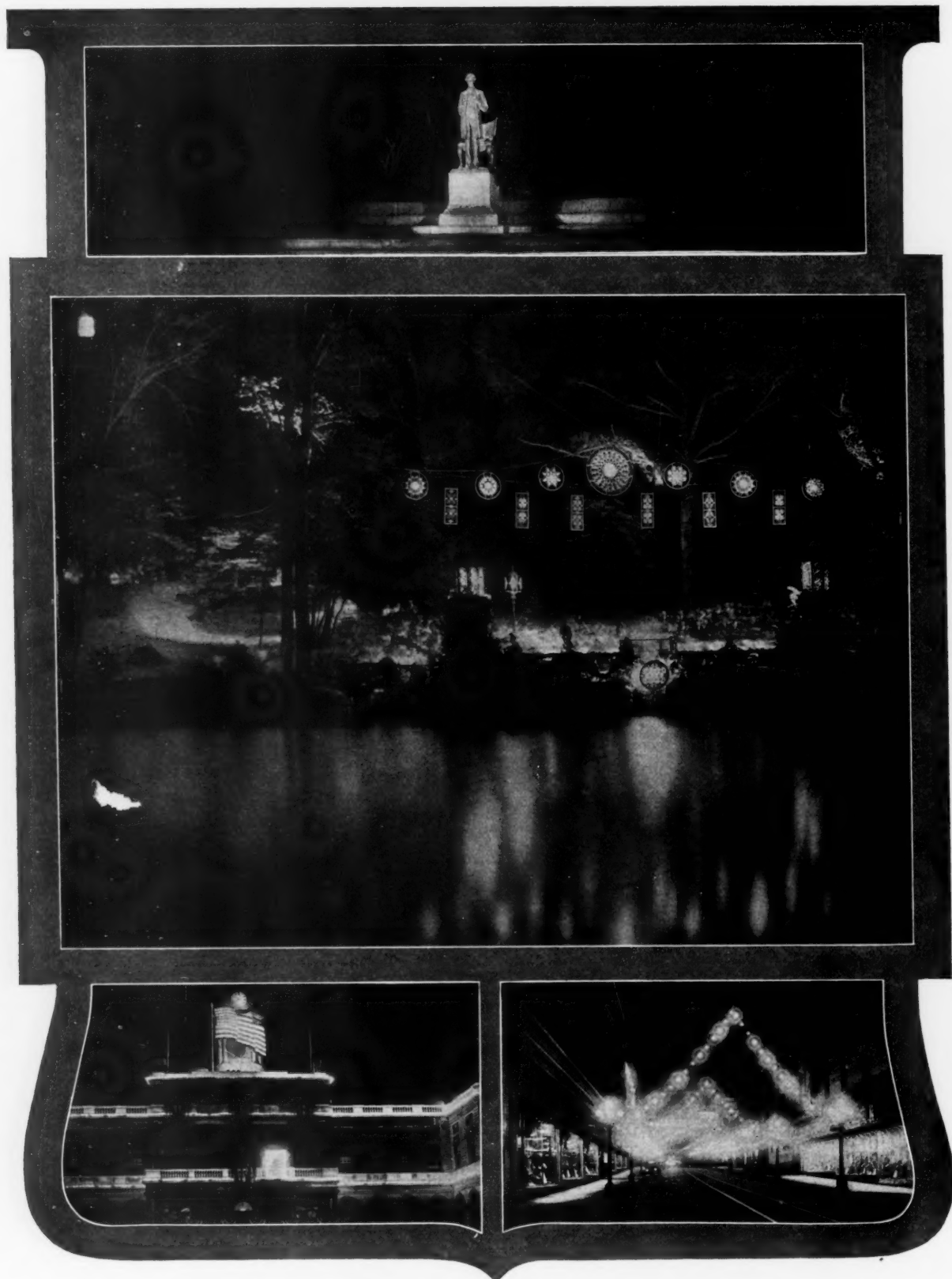
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How Electricity Can Help Your Town Celebrate a Fireworks-less Fourth of July

Fireworks and explosives of every kind are positively forbidden this Fourth of July. If, therefore, America is to celebrate the coming national anniversary it must be done electrically, and the electrical man must show the public how. These pictures suggest some of the many ways the contractor can apply electrical effects this Fourth and on Fourths to come. For example, the exquisite (and safe) electric set pieces seen reflected in the

park lagoon, were made from vari-colored paper patterns mounted on panes of glass and lighted from behind. At the top of the page the beautiful illumination of St. Gaudens' Lincoln, Lincoln Park, Chicago, shows how public statues can be floodlighted on any patriotic anniversary. And below are pictured suitable types of outline lighting and street festoons. Other Fourth-of-July suggestions are given on page 283.

Electrical Merchandising

The Monthly Magazine of the Electrical Trade

With which is incorporated ELECTRICAL MERCHANDISE

Volume 17

June, 1917

Number 6

Money Making Summer Business for the Contractor and Lighting Salesman

SUMMER is the season when every factory and shop undergoes an overhauling of some sort or other, and new equipment is installed to put the plant in readiness for the months to come. Of first importance to both management and worker in such a re-equipment program is the matter of good shop lighting—the very thing the contractor and lighting salesman have to sell.

And never before has good lighting been of such importance to the factory as it is right this year when every plant is going to be called upon to crowd its production to the utmost to meet war-time demands.

Good lighting speeds up output. It decreases spoilage. It reduces accidents.

From the standpoint of safety alone, the value of proper lighting of all work-places cannot be overestimated. In fact, in accident suits insufficient illumination is frequently held by juries to constitute "contributory negligence." And on the other hand, attorneys defending manufacturing companies have frequently found it good general practice to offer testimony showing plant lighting to have been sufficient and adequate.

Dangerous machinery in particular should be well lighted. It is not of much use to place a guard upon a dangerous machine if the illumination is so poor that moving parts cannot be clearly seen. Many a machine or process that may be considered safe in a well-lighted room becomes extremely dangerous if operated or performed in semi-darkness. Moreover, any shop is completely demoralized by frequent accidents. The excitement and lack of security have the effect of making operatives inefficient and nervous; meanwhile the work suffers. One accident, with the resultant damage costs and lost production caused by the "slowing up" of nervous operatives, may more than equal the cost of lighting the entire plant for a year.

A prominent engineer declares that "adequate lighting of shops and factories would probably prevent 25 per cent of the avoidable accidents in industries." And the cost of good lighting, it must be remembered, is after all, only a fraction of one per cent of the total operating cost of any plant. Realizing this and considering how good lighting

keeps production at a maximum, and waste due to spoilage at a minimum, it is hard to understand why so many otherwise progressive manufacturers still cling to old lighting equipment.

Good factory lighting produces noticeable results in more ways than one. From 200 replies to letters sent out by the Commonwealth Edison Company, Chicago, to factories where recent installations of improved electric lighting had been made it was found that 19 per cent of the managers stated that their "output was increased," 28 per cent; that "lighting costs were reduced," 37 per cent; that "operatives were better satisfied," 13 per cent; that "the change was worth the cost regardless of figures," and 3 per cent that they "could see no direct benefit." Testimony of this kind applying to local industries can be easily secured and is invaluable to the contractor and salesman in approaching prospects.

Good lighting has also always been found to have a most favorable effect in retaining experienced factory help. The tremendous cost of passing transient help through a factory is thoroughly recognized. Moreover, the actual welfare of employees is in itself an important consideration. Working conditions can be made much more agreeable by attention to good lighting, for it is now generally realized that cheerful, brightly lighted surroundings conduce to better spirits and better work.

These are all facts that, nowadays, do not have to be taught at length to any factory manager who these past busy months has been forced to rely upon his existing lighting system for night shifts. Among such managers a new respect for proper shop lighting has arisen, and so the contractor will find the way to profitable jobs already paved for him, by the factory man's own necessities.

Summer factory work makes timely slack-season business for the contractor—coming after his spring wiring rush is over, and before his fall lighting drive begins. It means, moreover, swinging bigger jobs and better earnings for the contractor doing a local business. And, most of all, it is a way to lend a hand in the big war job that faces Uncle Sam, and help speed up the industrial productivity of the nation.

LINING UP THE INDUSTRY ON THE BASIS OF "WHAT IT MEANS TO YOU"

How Better Business for Contractor, Dealer, Jobber and Manufacturer Resulted from the Real Co-operation of All Interests, Possible Under a Scientific System of Merchandising and Distribution

Evidence that "the Trade", Given a Chance, Can
Mould Public Opinion Toward the Central Station

And a Pacific Coast Answer to the Query—Who
Can Be the Electrical Merchant of the Future?

By O. H. Caldwell

A CERTAIN city council out on the Pacific Coast had ordered a cut in the local rates for electric light. A hearing date was named and the electric service company was asked to appear and show cause why the reduction should not go into effect.

On the morning scheduled 500 persons—electrical contractors, dealers, jobbers, manufacturers' representatives, salesmen, contractors' wiremen, merchants and customers—crowded their way into the hearing room, each man eager to see that the central station got a square deal, and to show by his presence his friendship for the utility company that every electrical man in that territory swears by.

Jobbers, contractors and dealers volunteered in succession to appear on the stand and testify, and for three hours one electrical business man after another presented arguments to show how local electrical development would be checked, and how, in general the business of dealer and contractor and of every independent electrical interest would be injured by any attempt to reduce central station earnings below a point where new development could be financed.

Toward the end of this remarkable session representatives of the electric light company also spoke for five or ten minutes concerning the proposed reduction.

But in the preceding three hours of vigorous argument by the friends of the company its case had already been won—before, in fact, any central station man had even a chance to speak for the company itself. Impressed by the vast outpouring of the local electrical fraternity and merchants in the company's behalf, and won over by the arguments advanced by many speakers who obviously had no direct interest in the central station's cause, the council voted to leave the rates as they were. The threatened rate reduction was killed.

Trade co-operation proved, that day, the power of its influence, even in the rarefied realm of central station "public relations."

For, public opinion in that Coast city, molded for months past by several thousand points of local contact with the electrical industry, was ready when the time came to express itself definitely in favor of a square deal for the central station.

And yet, curiously enough, the central station itself had never requested or even suggested the presence of any one of the hundreds of electrical men who went to the meeting that day. Instead, every contractor and electrical merchant who left his business—to come and fight "to keep the politicians from putting anything over on the electric light company," as one retailer voiced it—volunteered his services. It was the local electrical "trade" that, on the first scent of danger, organized itself to protect the interests of its big brother, the public service corporation.

Five years ago, however, local electrical conditions in the Pacific Coast city already mentioned were, to say the least, pretty "difficult" and discouraging. The central station was doing wiring and selling appliances at cost.

Some of the contractors were taking wiring jobs at a loss, hoping to get by on "extras." Failures were frequent, and jobbers and manufacturers suffered heavy losses through such bankrupts. In placing orders the contractors "played" manufacturers and jobbers against each other for



What practical co-operation means to the industry—Part of those present at the remarkable meeting held at Riverside, Cal., April 20, when contractors, jobbers and central station men met and formed the Pacific Coast Section of the N. E. L. A. for the discussion of local

discounts, and here again the wholesalers lost, even on such bona fide sales as they were able to make to the trade.

Meanwhile occasionally the contractor had an opportunity to even scores with the central station as a result of the latter's flexible policy toward installing building service runs. On new building jobs it usually turned out that the lowest bidder for the wiring had "neglected" to figure in the cost of running the service from the company's mains to the distribution point, and after a session or two with the contractor the central station generally found itself, in sheer self-defense, required to run the service itself at a cost of hundreds of dollars. Bitterness was also rife between the trade in general and the public service interests, aroused by the utilities' policies of appliance selling and house-wiring at cost—practices which worked to stifle local competition and development. In other words, an industry that might have stood together in friendly co-operation for the better service of the public, was wasting its life-blood and effort in internal strife.

Unhappily familiar as the above picture may be to readers elsewhere, this was also the status in a number of Pacific Coast communities when big Bill Goodwin, six-foot son of the Golden West, and at the time vice-president and general manager of the Pacific States Electric Company, called a meeting of some of his contractor customers and read them as a committee report a paper, "Co-operation Between Electrical Contractors and Jobbers—What It Means to You."

From the first reading of that paper dates the change that has come over the electrical trade of the Pacific

Coast, and the paper itself has since been officially adopted into the by-laws of contractor-dealers' associations all up and down the whole Pacific Coast.

In part Mr. Goodwin stated:

It is the belief of the committee that an electrical contractor unattached is

electrical supplies is through the electrical supply jobber to the dealer and contractor, who, in turn, serves the customer. By this method the dealer and contractor is enabled to have the advantage of a complete stock of electrical merchandise in the warehouse of the jobber, which can be drawn on at any time, no matter whether it is one item or a hundred, and can be assured of prompt shipments and satisfactory service from every standpoint.

The jobber makes it his business to keep in close personal contact with the dealer and contractor in his territory, studies his wants and plans to serve his needs, no matter what they may be. Through frequent calls of his salesmen he is often enabled to give valuable information, keeping the dealer advised of the new lines of standard goods on the market and furnishing technical data or give such other information as may be useful from time to time.

He is frequently able to be of service by carrying his contractor or dealer, who has been tied up financially on account of delays in jobs over which he has had no control.

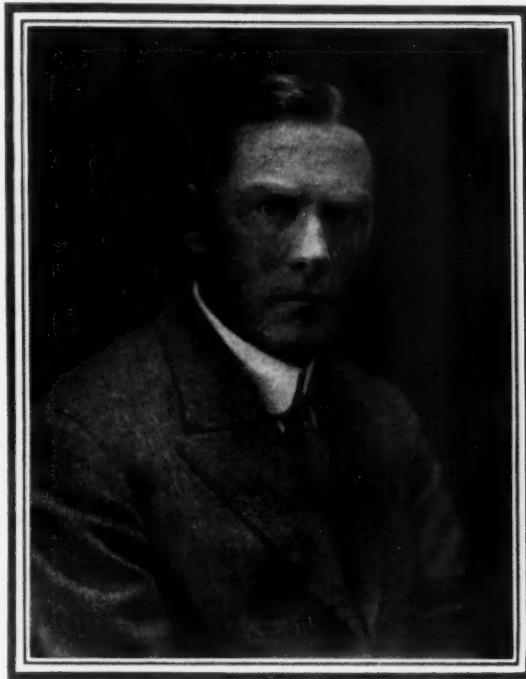
This kind of service cannot be had where the contractors and dealers do business at long range, and with people who are not in close touch or sympathy with their conditions or problems.

The dealer and contractor is the natural channel for distributing various electrical devices to the consuming public. He carries the material in stock and displays it on his counters and in his show windows. The consumer is thus enabled to see the material which he is purchasing and knows that he is getting full value for his money. He can get promptly any information he needs or instructions in the use of the various electrical devices, which is a service that could not be rendered satisfactorily by correspondence with some distant point.

The co-operation of the central station in each district is highly desirable and closer relationship with the architect and those engaged in the industry must also be maintained.

In the past the industry has failed to provide suitable show rooms at which the consumer can obtain electrical appliances. Therefore we will encourage the establishing of proper stores where material can be obtained at retail.

In order to gain the full confidence of the public in the industry we represent, the class of material furnished and the



WILLIAM L. GOODWIN

"After an experience of eighteen years in the electrical and jobbing business, during which—as a result of the working out of the principles here outlined—he built up one of the biggest wholesale electrical businesses in the United States, he sold out his interests a year ago, bought a fine farm in California, and made all his plans to till the soil as a future means of pastime and livelihood.

"But the industry couldn't let a man as useful as Goodwin get away from it like that, whatever the independence of his personal affairs!"

unable to keep apace with the progress of the industry, and consequently, is unable to properly serve his customers. If he will become a member of the association and will give it his support, it would be impossible to estimate the benefits he will derive from it, as evidenced by the results of association work in other lines of endeavor, whether commercial or political.

It is fully recognized that the economic and proper channel of distribution of



mutual interests in the industry. Nearly half the delegates present, according to dependable estimates, were electrical contractors and jobbers, and though the meeting was nominally a central-station gathering, all branches of the industry took part in the discussions

excellence of workmanship in its installation must be of the highest order. We should never recommend for sale an article in which we have not absolute confidence, and a full knowledge of the functions it will be called upon to perform.

Caution should constantly be exercised to see that only those contractors are admitted to membership of an association whose character and honesty are unquestioned and who have an established reputation for square dealing.

GETTING THE CONTRACTORS TO STUDYING THEIR OWN PROBLEMS

Meanwhile, following along the lines of the Federal Trade Commission's work in urging a better knowledge of business methods and of business costs, contractors' associations were being organized wherever a little group of contractors could be interested. At the monthly meetings of these associations, a definite effort was undertaken to instruct the men who needed such counsel, in better business methods. It was found, for example, that jobs were being figured based not on cost and a fair percentage of profit, but on competitive conditions, thus resulting in the skimping of jobs and substitution of materials—for both of which the public pays.

About this time an investigation by some of the jobbers' credit men developed the fact that many of the contractors, like the small business men cited by the Federal Trade Commission in its work urging a better knowledge of the merchant's and re-

tailer's cost of doing business, did not understand how to keep proper records. By showing these retailers how to maintain books to report "overhead," a start was made. At monthly meetings of the contractor's association, such business subjects were treated in papers and talks—although for the first year or two these talks had to be given chiefly by outsiders. The contractors themselves proved diffident at first, and there was little discussion in the meetings by them. They were not naturally debaters, and speaking in public came with difficulty. But after a year or two, as the work went on, one after the other contractor rose to his feet and "talked out" in meeting, until nowadays a contractors' meeting on the Pacific Coast is as full of discussion as a closing day of Congress. Moreover the contractors are preparing and reading papers, and thinking to the bottom of their business and trade problems in sound, business-like fashion.

Besides the monthly meetings of the local associations, jobbers' men traveled over the State, taking one group of contractors after another, pointing out to them the need of studying their own costs, and enlisting them as members of the nearest association.

And at these association meetings constructive programs were presented and papers were read on such subjects as the following:

"Determining the Cost of Doing Business."

"The Items That Go to Make Up 'Overhead.'"

"How to Operate an Electric Shop."

"Proper Estimating Methods."

"Good Merchandising Methods."

"Relations Between Contractor and Jobbers."

"Relations Between Contractor and Central Station."

EDUCATING JOBBERS AND CENTRAL STATION EXECUTIVES

But while the instruction of the contractor was thus going on, the education of the jobber, manufacturer and central station man was not being neglected. A series of golf parties was started, and to these tourneys, held at various Pacific Coast country clubs, there journeyed by invitation the electrical golf players of the vicinity, with shining brassies and vacation high spirits.

Through means of a careful system of planning, each manufacturer was paired off to play with a jobber, and together they went their way around the links, the jobber improving the sunny hours on the greensward to explain to the manufacturer the plan to line up contractors, dealers and central stations in a practical co-operative plan, which would encourage the contractors and dealers generally to enter into active competition for retail business.

Next the central station men—who until now had held rather aloof from the whole matter—were invited to join



ON THE PACIFIC COAST, AT LEAST, THE ELECTRICAL CONTRACTOR-RETAILER IS READY WITH THE PROOF, AS WELL AS THE ANSWER, THAT HE IS GOING TO BE THE ELECTRICAL MERCHANT OF THE FUTURE

An example of the complete display of samples offered by a Pacific Coast wholesaler for the benefit of his contractor customers. All of the exhibit here spread out is solely for the convenience of contractor-retailer buyers, as the wholesalers of the Pacific Coast confine their business entirely to a wholesale basis. Incidentally here is a lesson in store arrangement for the retail merchant himself.

One of the many attractive electric shops that have sprung up and are doing a thriving business on the Pacific Coast since the new era of co-operation which has encouraged electrical contractors to compete for appliance selling business. In the Far West it is contractors' shops like this one that give pointed answer to the often-asked query: "Who will be the electrical dealer of the future?"

the golf parties, and in the seclusion of grassy fields and big blue skies, each central station executive had explained to him the advantages—to the central station—of co-operation in the industry, with the retail merchant selling appliances and the contractor doing the wiring—all on a "live-and-let-live" basis.

And finally one day there came the big moment, out there by the approach to the fifteenth hole, when one big central station manager asked his jobber companion what the central station could do to help in the movement. It was the question for which the co-operation workers had been patiently waiting months to have put to them.

Frankly the jobber-co-operator replied:

"If you want to help, the way is this: Encourage as much as you can the contractors to open retail stores and compete for retail business, so that your community will be more adequately served.

"Give the contractors a chance to co-operate."

And so the message of real co-operation went on spreading through the industry.

PRACTICAL HELP FOR THE NEW MERCHANT

And between golf games with central station men and jobbers, Bill Goodwin and the co-operative committee he headed were also busy providing practical helps and safeguards for the ambitious man emerging into the electrical merchandising field. Contractors were encouraged to open up retail stores, but the jobbers' salesmen were cautioned, on the other hand, never to oversell these new dealers until their demand had been established. Instead of buying 500 sockets of one type, for example, such a new merchant was first asked to order, say, 500 different pieces—sockets, receptacles, pull switches, plugs, key and keyless sockets, etc., in order that the new store might be prepared to meet any kind of call from its customer.

And each jobber's salesmen had solemn instructions from his home office, on his arrival in a contractor-dealer's store, to (1) take off his coat, (2) ask for a broom and sweep up the floor, (3) dust off the stock, (4) borrow a bucket and rag and wash the show window, and (5) trim up the window display and dress up the showcase. Of

course the proprietor and his wiremen got the idea, too, and were soon helping at the job of cleaning up. Hence, when the salesman departed, he always left behind him a better-looking store as a practical example to the owner. The effect on the retail trade of such practical measures was felt immediately, and as the stores became more attractive the retail business grew by bounds.

To encourage the dealers to put in attractive show windows, several thousand dollars was subscribed and invested in window display and mechanical attractions, such as magnetic dancing dolls, electric trains, etc. These displays were loaned to one merchant after another, and passed from store to store—for by this time several hundred up-to-date and attractive electrical merchandising shops were in operation over the Coast country.

HOW THE RETAILER AND JOBBER HAVE PROFITED

The jobbers' credit men were also sent out to instruct the dealers in simple bookkeeping methods. Moreover, during their visits these credit men would ask to look over the dealers' accounts in a friendly way, and by dividing these into thirty-day, sixty-day, ninety-day and 120-day accounts, to show what proportion of these accounts were long-time payments.

The tendency has always been for the electrical contractor to let his accounts run indefinitely rather than ask for his money, for fear of offending his customers. By pointing out the losses usual with such long-time business, the credit man was usually able to get the dealer to "pound on" the 120-day and ninety-day accounts. Of assistance in making such delinquent collections were also, of course, the carefully prepared form collection letters, furnished by the expert credit men of the larger houses. Such a drive on collections speeded up, of course, the dealer's payments to the jobbers, and so the benefit was passed all along the line.

The dealer, enjoying better credits, was soon enabled to buy in larger quantities, from which he again profited by better discounts, while the jobber benefited by the increased business and improved credit of each customer, and also from the multiplication of retail outlets—all of which, by the way, meant bigger sales for the

manufacturer—and paid-up accounts for all.

TO CENTRAL STATION AND CONTRACTOR

Meanwhile many of the central stations on the Coast have gone out of the wiring business and sell appliances at retail prices which encourage competition and promote the development of retail merchandising business. In return the central stations have profited doubly—first, by having numerous retail appliance salesrooms in each community, instead of one or two operated by themselves; and, second, on the important public relations side, from the warm sympathy of the electrical trade and local public, as best evidenced by the story of the rate meeting told at the outset of this article.

The contractor has been encouraged to compete for retail merchandising business without encountering the destructive sales campaigns of the central stations. Enabled to merchandise at an honest profit, as recommended by the Federal Trade Commission, the contractor-dealers have opened up more and more stores, benefiting in turn central station, wholesaler and manufacturer. And with the central station out of the wiring game the contractor has developed his rightful business to a volume where it can be operated with a profit, and make an honest living for the owner. The central stations are for their part helping the contractors find customers, and the latter realize that each new outlet for central station energy consumption means also a sale and a regular customer.

CO-OPERATION THAT HAS IN IT "SOMETHING FOR YOU"

In fact, out on the Pacific Coast they have found a practical way to co-operate, because there, under a scientific system of merchandising and distribution, "co-operation" is not an empty phrase—instead it signifies a working plan for contractor, dealer, jobber, manufacturer and central station, to each of whom it frankly offers the benefits of "what it means to you." And with the sum of the industry's effort turned into constructive channels, instead of being wasted in fruitless internal quarrels, the Pacific Coast electrical trade is to-day selling more electrical goods than ever before and doing a larger business, while

serving the public to a greater extent than was ever before possible. In fact, the per capita sale of electrical supplies is now 50 per cent higher on the Pacific Coast than the average corresponding figure for the country at large. And on the Pacific Coast, at least, the electrical contractor has come into his own, as the electrical merchant of the future.

Out of this trade-wide reformation on the Pacific Coast, William L. Goodwin—whom every electrical man in the Pacific States region hails as the master-spirit and worker of the reform—has shaped an interesting prediction, based on his statements in

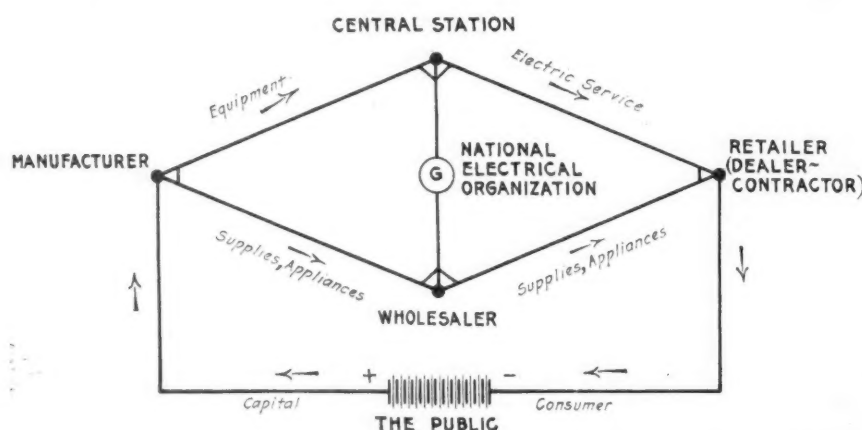
who is best equipped to serve the needs of the individual customer.

THE WHEATSTONE BRIDGE ANALOGY

Goodwin's idea of the electrical trade of the future is best illustrated by a diagram based upon the familiar Wheatstone Bridge, which has some interesting analogies. The battery, the source of energy, is shown in the sketch as the public, whose investors furnish the capital for the electrical industry. This capital the manufacturer converts into generating and distributing equipment for the central station, or into appliances and supplies to be sold through the wholesaler

terests must work in absolute harmony and with due respect to the dangers of an unbalanced flow which only comes with an unbalanced condition and when applied to merchandising is reflected in unscientific merchandising policies or methods.

Again, following the diagram there is nothing to prevent the manufacturer, jobber or central station from selling directly to the consumer, but when doing so, in order to complete the circuit, contact must be made in each case with all branches of the industry and with due regard to the fundamental basis of the industry's balance.



MR. GOODWIN'S WHEATSTONE BRIDGE DIAGRAM OF DISTRIBUTION AND SALES IN THE ELECTRICAL INDUSTRY

The battery, the source of energy, is shown in the sketch as the public, whose investors furnish the capital for the electrical industry. This capital the manufacturer converts into generating and distributing equipment for the central station, or into appliances and supplies to be sold through the jobber to the retailer. The central station has as its product, electric service, which, it will be noted, can be used only through the wiring installed by the contractor-retailer. The latter thus becomes the point of retail contact of the manufacturer and jobber with the consuming public, which, by the way, following the circuit, brings us back around to the negative side of the battery, thus completing the analogy. At the center of the Bridge, in place of the galvanometer (which indicates the balanced condition of the circuits of flow), Mr. Goodwin has suggested inserting some national electrical body representing all the various interests in the electrical industry.

that classical paper on "Co-operation" of 1914 already quoted.

SCIENTIFIC MERCHANDISING OF THE FUTURE

Goodwin thinks that the time is fast approaching when the distribution of electrical materials will be along scientific and economic lines from the manufacturer through the jobber to the dealer. To the central station, he predicts, the manufacturer's energies will be devoted to selling generating and distributing equipment, while devices and supplies for use by the customer will, he thinks, be most economically marketed first through the jobber with his widespread economical distributing organization, and then in turn through the retailer (the dealer and contractor),

to the retailer. The central station has as its principal function the supply of electric service, which, it will be noted, can be used only through the wiring installed by the contractor-retailer. The latter thus becomes the point of retail contact of the manufacturer and jobber with the consuming public—which latter, by the way, following the circuit, brings us back around to the negative side of the battery, thus completing the analogy.

It is not Mr. Goodwin's thought, in submitting this diagram, that there will be any tendency to restrain either the manufacturer, central station or wholesaler in the performance of any function of the industry in which they elect to engage. But the diagram, as well as the Wheatstone Bridge principle, clearly indicates that all the in-

HOW GOODWIN HAPPENED TO COME EAST

That Goodwin indulges in no fanciful theories without the solid backing of the facts of experience is indicated by the record of his own success on the Pacific Coast. After an experience of eighteen years in the electrical jobbing business, during which, as a result of the working out of the principles already outlined, he built up one of the largest wholesale electrical businesses in the United States, he sold out his interests a year ago, bought a fine farm, and made all his plans to till the soil as a future means of pastime and livelihood.

But the industry couldn't let a man as useful as Goodwin get away from it like that, whatever the independence of his personal affairs!

For meanwhile a group of far-seeing men in the East who had learned of the work Goodwin carried through on the Pacific Coast approached him with an offer to undertake a similar study of the job of lining up the local electrical trade in other cities.

With the prospect of that farm ahead, the idea naturally was not very appealing to Goodwin. He laughed good-naturedly at their offers and turned back to his catalogues of farm implements and garden seeds. But back came the offers, again, and again, and finally after five or six months of this importuning, in the course of which there was pointed out to Goodwin the great opportunity for work such as only he could do, he consented to put away his farmer dreams—and prepared to come down to New York.

So at present Goodwin is on the job in New York City and vicinity, meeting with contractors' associations, addressing contractors and jobbers, talking over trade problems, and studying

whether the successful California experiment can be worked out also in the older communities of the East.

SOME INTERESTING STATISTICS ON THE NEW YORK TRADE

And when Goodwin gets to work he goes some! Already, in a few weeks' study of the New York situation he has uncovered the fact that there are 6200 electrical retailers, contractors and dealers in the New York territory, a fact which no one ever seems to have even guessed before. Moreover, he has found that there are fourteen different associations of contractors and dealers in the big city, but that

altogether these fourteen bodies have only 300 members, including duplications—leaving nearly 6000 retailers and contractors without any association affiliation whatever.

And instead of the dozen jobbers that the average electrical man thinks of as doing New York's wholesale business in electrical wares, Goodwin has already located forty-two, some of them doing a bigger business than the firms whose names are familiar words in every office in the trade.

Since Goodwin has come to town the contractors' association meetings have been real events. "Big" contractors doing a business amounting to hun-

dreds of thousands of dollars a year, are coming to association meetings to sit alongside the earnest "little fellows" who are doing sound business on a small scale, and together they are frankly discussing the problems of the trade.

The leaven is working, and the big trade movement is on!

And ELECTRICAL MERCHANDISING, placing itself squarely behind this great work of Goodwin's, is preparing for future numbers facts and figures to spread broadcast throughout the industry this message of practical co-operation and "What It Means to You."

Competing on a Basis of Quality and Service

A Suggested Code of Business Merit by which the Electrical Contractor Shall Be Judged in His Relations with the Owner and Architect—How Performance Can Be Put Above Price, and Good Service Ahead of Mere Sharp Figuring

By F. W. LORD

President Lord Electric Company, New York City

ELECTRICAL construction, like any work into which quality enters, cannot rightly be appraised by the mere comparison of the figures of the bids of competing firms. The immediate pecuniary consideration should not be the one and only basis of doing business.

At first thought, this may seem to imply throwing to the winds all the economic fundamentals of demand and supply, competition, and the law of the survival of the fittest. But that is not the case, for we shall see that there is a wiser and more equitable basis for comparing competitive bids than contrasting the figures only—the basis of considering the contractor's reputation for fair dealing, for doing good work, and for giving efficient service.

THE OWNER AND THE CONTRACTOR

Some architects and engineers will tell the owner, and really believe what they say to be true, that their plans and specifications are so definite and binding that all bids may be judged by the figures alone. This is a fallacy, in spite of the assumption that none but first-class contractors are allowed to estimate. As the owner should realize, his architect is more or less compelled to defend this conventional way of obtaining prices for, other-

wise, the owner would say, "What is the use of competition? Why not just give the order to some concern best fitted to do the work?" As a matter of fact, under certain circumstances this may be the best way, but as already mentioned the author does not advocate eliminating competition, but will endeavor to point out that the owner's interests often may be best conserved by awarding the contract to other than the lowest bidder. Some of the reasons for this are as follows:



F. W. LORD

The low bidder may have a good reputation, but with a surfeit of work at the time be unable to handle the contract as well as ordinarily; he may not have had experience in just this particular type of building, or in the vicinity of the work, and thus be unfamiliar with local labor conditions; or he may not be so well able, for a variety of reasons, to obtain the proper men or materials as some other contractor; he may be careless or incompetent, or so careful and fussy that he would delay the whole general progress of the building.

WHERE SAVINGS ON CONTRACT PRICE MAY PROVE COSTLY

This question of time is a factor of much more importance than most owners appreciate. The fact that a specification states that "time is the essence of the contract" does not make a slow contractor fast. The important fact to realize is that when a building is to be finished quickly it is essential that all the trades be kept up to speed all the time.

It is a simple thing to prove that a few hundreds of dollars saved by letting just one of the sub-contracts to a slow or inefficient concern may so retard the whole operation that the apparent saving on this one contract

really costs the owner thousands of dollars in interest and non-use of the building. Probably not one-quarter of the buildings started are done on time, but how often does the owner figure out or know what the delay has cost? In almost all these cases the delay could have been avoided if more care had been exercised in the selection of the contractors, and if more systematic recognition were given to the contractor who has always been prompt and efficient.

There is another reason why some contractors should be shown a preference, and that is, on personal or psychological grounds. In other words, some architects and builders, or some engineers and sub-contractors, "pull well together"; and when they thus work in harmony there is absolutely no question but that it is to the advantage of the owner. If opposite conditions prevail, not only does the quality of the work suffer but, also, it takes longer to do the work, and certainly the cost is indirectly more.

In this discussion it must, of course, be borne in mind that the contractor's failings or virtues are all relative and that no contractor is perfect. One of the architect's functions should be to discriminate between the different bidders and weigh their relative advantages from the standpoint of the owner's ultimate interests, instead of from the immediate one of saving a small sum on the letting of the contract.

AWARDING THE CONTRACT TO THE MOST BROADLY DESERVING BIDDER

From the ethical standpoint it is evident that such a policy is not unfair to the bidders, as the award goes to the one who is most deserving from the broadest standpoint. Specifications often state that the owner reserves the right to let the contract as he may see fit, and this prerogative should be more generally exercised.

One way of ranking contractors according to merit is to keep a list of those who are permitted to estimate, changing the order of names on the list from time to time, in accordance with the architect's or engineer's experience. If the contractor is late, makes mistakes, does poor work, overcharges for extras, is too technical, or in any other way gives trouble, it should be noted, and his ranking affected accordingly. Furthermore, it should be made known that such lists are used, as by this means the whole

morale of the business is improved and the owner's interest best guarded.

It is consequently contended, and certainly with justice, that a contractor's years of faithful service should entitle him to a preference. Certainly a great incentive to doing good work would be the knowledge that it would be so rewarded.

Architects know very well that this is true, but few of them have the moral courage to use their influence in favor of one of the higher bidders, fearing that they will be criticised as having ulterior motives.

As most owners build but once, they should trust just as much to the rec-

(Continued on page 268)

How One Dollar Will Help Make a Traffic Manager of Your Shipping Clerk

By GEORGE F. GRANT

George F. Grant Company, Inc., New York City



OBSERVATION of shipping papers from many electrical jobbers, dealers and manufacturers shows a great disregard of the importance of describing contents of shipments in accordance with the classification published by the transportation companies under the direction of the Official Classification Committee and the Interstate Commerce Commission.

The investment of one dollar with the committee at 143 Liberty Street, New York City, or with any freight agent, will secure a copy of the official classification and all new issues of supplements, etc., for one year. A little time devoted to this book by the shipping clerk will very promptly inform him how to describe shipments to secure the lowest legitimate rates.

The average shipper of electrical goods makes out his bill of lading simply as so many packages of electrical supplies, without inserting weights, with the result that the shipments are assessed at first-class rates, it being an unwritten and generally recognized rule of the carriers that "shipments not otherwise specified shall take first-class rate."

Examination of the classification will show, however, that iron conduit, pottery insulators (which includes porcelain knobs, tubes and cleats), rubber-covered wire, armored cable and other commodities can be properly shipped at third class or lower.

Sockets, attachment plugs, rosettes, etc., when described according to the classification, as electric-wiring sockets, plugs, etc., take second class rate.

Proper description will alone result in a saving of 10 to 25 per cent in transportation; moreover, the insertion of actual weights on shipments totaling more than 100 lb. is also a most important matter. The writer has personally seen shipments of 100 lb. or less, which, shipped without the weight being stated in bill of lading, were billed on arrival at destination, sometimes as high as 400 lb.

However, in every instance by getting the actual weight and calling for the freight agent to check this weight, we have been able to secure proper adjustment.

We are perfectly convinced that the electrical trade is sacrificing many, many thousands of dollars in this way, and we submit, to our jobbing friends particularly, that a part of good service is to give this matter the consideration it deserves. Spend the dollar now for the classification booklet and present it to your shipping clerk with suggestions and instructions to read and observe it faithfully.

The result is bound to be a substantial reduction or saving in the cost of transportation, a most important thing to the small dealer and proportionately more important to the larger ones.

Utilizing Every Last Inch of Contractor-Dealer's Shop Space

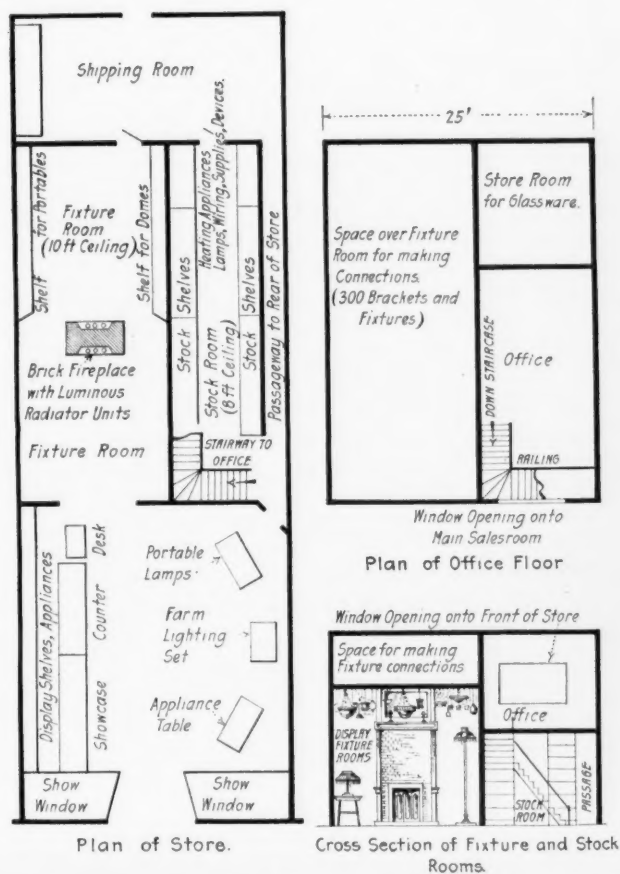
Ingenious Two-floor Layout by which J. R. Bloom Has Provided Room for Fixture Displays, Storage of Supplies and Stock, and Business Office in his Store at Pine Bluff, Ark.

"Johnny Bloom at Pine Bluff has one of the neatest little electric shops in the whole country," the traveling salesman opposite will tell you, as together you sway and groan across the Arkansas landscape on the rough-riding Cotton Belt railroad. And the pains which John and his brother have taken to make the Pine City Electric Shop attractive and to keep it so is being rewarded by the rapid growth in their retail and contracting business. Space got to be at a premium in the Bloom brothers' new shop, so carpenters were called in to slice the rear of the store into two decks, with the result shown in the sketch. From the upstairs stockroom a window opens into the main salesroom, so that when the men are out the girl bookkeeper can tend store. The stockroom is convenient to both office and salesroom, while a passageway admits to the shipping room in the rear, without passing through either storeroom or fixture-display quarters.

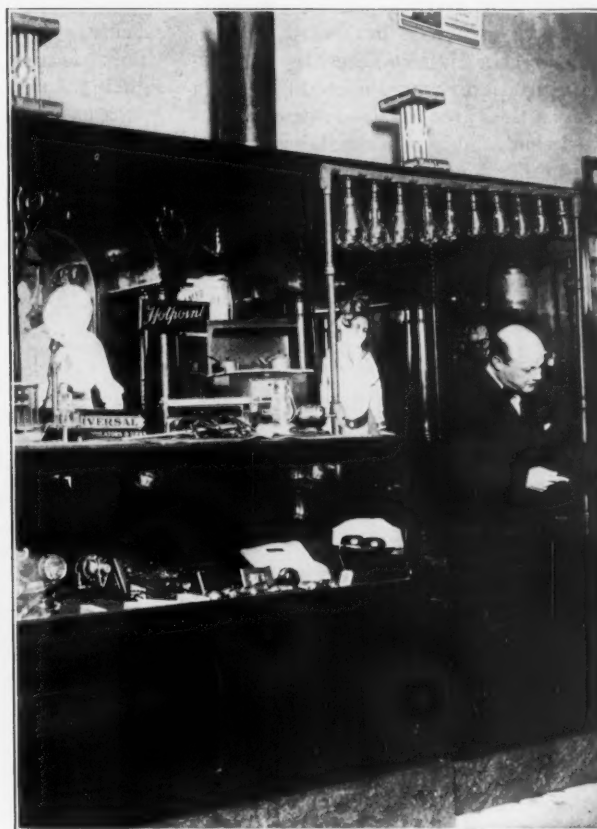
The fixture-display room is so equipped that any of the 300 ceiling and bracket fixtures can be lighted to show the customer how the unit will appear installed in his own home. Connections to fixtures are made in the open space above the fixture room, which is entered from the glassware store-room.



An attractive and cozy feature of the fixture-display room is the real-brick mantelpiece, with its luminous-radiator heating units.



Appliances and portable lamps are displayed in the main salesroom, while fixtures are exhibited in two attractive apartments entered at the left. Flanking the fixture room is the stockroom, with the shipping and assembling rooms at the rear.



"The selling force is the hub of any business" declares John Bloom of the Pine City Electric Company, "and not one of the spokes branching out from that business." For your store notebook, observe that the appliances on top of the showcase rest on soft green velvet pads. Also observe the good use Mr. Bloom makes of the selling helps furnished by the manufacturers.

Some Simple Rules for Figuring Factory Lighting

How the Electrical Contractor and Lighting Salesman Can Estimate the Size and Number of Units Needed. Localized, General, and Group Lighting. Illumination Figures from Actual Installations That Help in Laying Out Other Jobs

By NORMAN MACBETH*

FACTORY lighting is usually carried out in one of three ways—(1) by localized lighting, (2) by general lighting, and (3) by group or "localized general" lighting.

"Localized lighting" is the older method typified by the small incandescent lamp used by the shop workman or factory operator and placed within his convenient reach. Such a lighting arrangement is useful only over a small area and its effectiveness depends largely upon the judgment of the user. Such local-lighting units may be suspended, mounted on brackets, or used as portables.

There are certain manufacturing processes that cannot be economically lighted without employing portable lamps—as, for example, the work of machining the interior of castings where light from a general illumination system would not reach. Localized lighting is also necessary for certain processes where exceedingly high intensities are required over a limited area, and in other instances where the reflection of the light from the surfaces to be observed is used in the inspection of work. Localized lighting is satisfactory for small, widely separated areas. Any rearrangement of the manufacturing processes, how-

ever, will usually demand a change in wiring. For an extended system of localized lighting in a large plant, the cost is likely to be comparatively high on account of the large number of units required. The maintenance cost will also be high owing to the rough handling which lamps and reflectors invariably receive.

"GENERAL LIGHTING" IN THE FACTORY

General lighting originated as a system resulting from the use of arc lamps, but was later employed with clusters of small lamps, and more recently has been used with the larger incandescent lamps. The purpose of this system is to provide a uniform intensity of illumination throughout the room to be lighted, independently of the arrangement of the furniture, machinery or processes. Usually more energy is required than for localized lighting. On the other hand, larger lamps of considerably higher efficiency can be used with a minimum of installation and maintenance expense. General illumination is particularly adapted for large, high, open workrooms where manufacturing is reasonably condensed and light is required throughout the entire room.

GROUP OR "LOCALIZED GENERAL" LIGHTING

The graduation in size of tungsten-filament incandescent lamps fills in the gap that formerly existed between the low-candlepower carbon-filament lamps and the high-candlepower arc lamps. With tungsten lamps it is possible to secure almost any average intensity

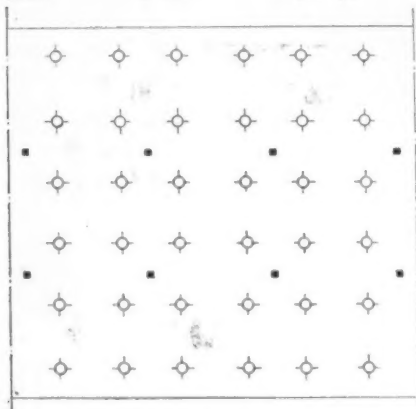
with any reasonable spacing of outlets.

As a result of this flexibility in lamp sizes, the practice has grown up of employing a system of location very similar to that for general illumination, but with lamps placed in such a manner as to produce the maximum intensities at important points where considerable light is required, while lower intensities are furnished at intermediate points. This method may be applied in machine shops, weave rooms, and other workrooms where machinery is approximately uniformly spaced. It is also suitable for table or bench lighting.

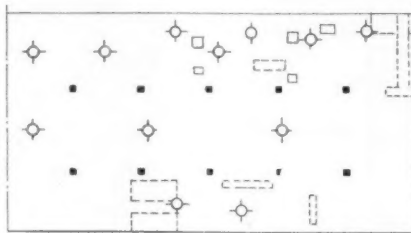
This scheme of lighting is sometimes referred to as "group lighting" and embraces a wide range of practice, varying from general illumination at one extreme to localized high-intensity illumination at the other. For lighting small plants it is being employed to a greater extent than any other arrangement. The general practice with all these systems of general lighting (excepting, of course, in strictly "localized-lighting" installations) is to equip the lamps with permanent, well-constructed fixtures suspended at least 8 ft. or 9 ft. above the floor and arranged in such a manner as to discourage handling or shifting the position of the lamp and reflector.

Lamps should be placed out of the direct range of vision, and near the ceiling when this height is 12 ft. or less—the "extensive" bowl-type reflector 8 ft. above the floor, and the "intensive" bowl-type at a height of 10 ft. to 11 ft. The deep-bowl reflector or a similar method should always be used with Mazda C lamps and

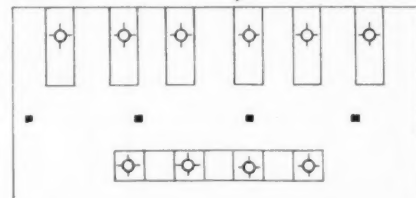
*Mr. Macbeth, who is a practicing illuminating engineer and the inventor of the Macbeth illuminometer, was formerly editor of the *Lighting Journal*, which was consolidated with *ELECTRICAL WORLD* in March of this year.



For general lighting in a factory the outlets are spaced at equal distances over the entire ceiling, resulting in a uniform distribution of the light throughout the room



"Localized general lighting," sometimes called group lighting, requires outlets placed with special reference to the machines or work spaces



Localized lighting in a shop. Note how the outlets (which supply comparatively small lamps) are definitely placed with reference to each machine or to the work to be done

every endeavor made to avoid glare from the highly concentrated filaments of these lamps. The larger sizes, 500-watt to 1000-watt lamps, are best adapted to heights above 20 ft.

Reflectors should always be used and attention should be given to the proper screening of lamp filaments. Deep-bowl enameled steel reflectors in the sizes adapted to the size of lamps to be used, will probably result in satisfactory installation.

FIGURING THE "WATTS PER SQUARE FOOT"

The only correct way to figure the size and number of lamps to use for any given location, in order to secure a desired intensity of light on the work, must take into consideration the intensity in foot-candles desired, the arrangement of outlets, the light distribution characteristics of the reflector selected, the losses due to light absorption by the various surrounding surfaces, and the total quantity of light from the lamp.

However, several years' experience with reflectors that have been prac-

tically standardized and used with the Mazda B or vacuum tungsten lamps, and the fact that these lamps produce approximately a given quantity of light per watt of input, have resulted in the wide use of the "watts per square foot" method of figuring—a plan which reduces the calculation necessary to its simplest possible form. Some of these figures showing the "watts per square foot" required for lighting various kinds of interiors are shown in Table 1. To make use of these figures in computing the lighting of a given interior it is then only necessary to multiply the area in square feet by the "watts per square foot," as shown in the table. This gives the total watts necessary to light the given space, and this figure when divided by the watts per lamp to be used gives the number of lamps of the given size required. Many thoroughly satisfactory lighting installations have been made with no other information than this "watts per square foot" factor and a few general rules as to installation like those which are given above.

FIGURING FOR MAZDA C GAS-FILLED LAMPS

With the coming into wider use of the Mazda C or gas-filled lamps, the same factors originally prepared for the less efficient tungsten-filament lamps have been used to a considerable extent. In general this may be satisfactory as the demand for the better lighting of to-day calls for higher intensities than were deemed desirable when the original tables were published.

There is no good reason, however, why these higher intensities should just "happen" in this manner, for the comparative efficiencies of different sizes of these lamps are not the same throughout the various sizes. The 100-watt Mazda C lamp, for example, gives only 15 per cent more light per rated watt than the average light output per watt for the 100-watt Mazda B lamp, while on the other hand the 1000-500 watt gas-filled lamp produces 80 per cent more light per watt.

Table II will be found useful in extending the range of the watts per

TABLE I—INTENSITIES AND WATTS PER SQUARE FOOT WITH MAZDA B LAMPS FOUND SATISFACTORY IN PRACTICE FOR DIFFERENT CLASSES OF INDUSTRIAL LIGHTING*

Industry and Room	Foot-candle Intensity	Watts per Square Foot Mazda B Lamps	Industry and Room	Foot-candle Intensity	Watts per Square Foot Mazda B Lamps
Bookbinding:			Power stations.....	2.0—4.0	0.5—1.0
Folding, assembling, pasting.....	2.0—3.0	0.5—0.75	Printing shops.....	2.0—4.0	0.5—1.0
Cutting, punching, stitching.....	3.0—5.0	0.75—1.25			
Embossing.....	4.0—6.0	1.0—1.50	Steel work:		
Canning plants:			Unloading yards.....	0.1—0.3	0.03—0.08
Pressing tables.....	1.0—1.5	Note 1	Open hearth floors (soaking pits and cast houses).....	0.1—0.3	0.03—0.08
Filling tables.....	1.0—1.5	Note 1	Mold, skull-cracker and ore yard.....	0.1—0.3	0.03—0.08
Packing tables (dried fruits).....	1.5—2.5	Note 1	Loading yards (inspection).....	0.3—0.5	0.08—0.12
Preserving cauldrons.....	2.0—2.5	0.5—0.6	Blast furnace (cast house).....	0.3—0.5	0.08—0.12
Coffee roasting, at tables.....	3.0—4.0	0.75—1.0	Rolling mills.....	1.0—2.0	0.25—0.5
Packing tables.....	1.0—2.0	Note 1	Wire drawing.....	1.0—2.0	0.25—0.5
Shipping room.....	1.5—2.5	0.40—0.60	Stamping and punching sheet metal.....	2.0—5.0	0.5—1.25
Factory (general):			Threading floor of pipe mills.....	1.0—2.0	0.25—0.5
General illumination.....	3.0—6.0	0.75—1.5	Transfer and storage bays.....	0.5—1.0	0.12—0.25
General illumination, supplemented by localized light	1.0—2.0	0.25—0.5	Shipping.....	1.5—2.5	0.4—0.6
Bench lighting.....		Note 1	Stockroom.....	0.8—2.0	0.2—0.5
Foundry:			Warehouse.....	0.5—1.0	0.1—0.25
Bench molding.....	2.0—5.0	0.5—1.25	Forge and blacksmithing:		
Core making.....	1.0—3.0	0.25—0.75	Smithing (ordinary anvil work).....	2.0—4.0	0.5—1.0
Cupola.....	1.0—2.0	0.25—0.50	Machine forging.....	2.0—3.0	0.5—0.75
Foundry (general lighting).....	1.0—3.0	0.25—0.75	Tool forging.....	3.0—5.0	0.75—1.25
Floor molding.....	1.0—2.0	0.25—0.50	Grinding.....	2.0—5.0	0.5—1.25
Machine molding.....	1.0—3.0	0.25—0.75	Tempering.....	2.0—4.0	0.5—1.00
Tumbling and cleaning.....	1.0—2.0	0.25—0.50	Paint shop:		
Machine shop:			Fine work—finishing.....	4.0—8.0	1.0—2.0
Assembly and erecting.....	1.0—3.0	0.25—0.75	Coarse work (first coats, etc.).....	2.0—4.0	0.5—1.0
Bench work (fine).....	5.0—10.0	1.25—2.50	Pattern shop:		
Bench work (rough).....	3.0—5.0	0.75—1.25	Wood.....	3.0—5.0	0.75—1.25
Buffing and grinding.....	2.0—4.0	0.50—1.00	Metal.....	4.0—6.0	1.0—1.5
Inspecting.....	4.0—7.0	1.00—1.75	Power house:		
Machine shop (general work).....	3.0—5.0	0.75—1.25	Engine room.....	2.0—3.0	0.5—0.75
Machine tools (coarse work).....	3.0—5.0	0.50—1.25	Boiler room.....	0.8—1.5	0.2—0.40
Machine tools (fine work).....	5.0—8.0	1.25—2.00			
Outdoor construction work.....	0.25—2.0	0.05—0.5			

*Handbook on Incandescent Illumination, Edison Lamp Works of General Electric Co., Harrison, N. J.

Note 1—A wide variety of processes is carried on at benches and tables. Single benches 2.5 ft. to 3 ft. wide should be lighted from units placed above the outside edge of the bench. With double benches 5 ft. to 6 ft. wide, mount the units over the center line. Use 25 to 100-watt lamps with intensive type bowl reflectors at heights above the bench

equal to four-fifths the distance between units, or extensive-type bowl reflectors at a height equal to one-half the distance between outlets. The spacing of outlets and size of lamps to use depends upon the intensity of illumination desired.

Note 2—The above watts-per-square-foot

values are for Mazda B lamps equipped with efficient reflectors. They are based on a light production of 10 lumens per watt with a 40 per cent utilization factor. An increase in the above values would be required for very small or darkly finished rooms, or where belts, pillars or other obstructions interfere with a desirable arrangement of lamps.

square foot values found to be satisfactory with the vacuum lamps, to the entire range of gas-filled lamps at the efficiencies of lumens per watt standard at this time and noted in this table.

HOW TO USE THE TABLES

Suppose, for example, it is desired to figure the lighting for a bookbindery, first for vacuum-type lamps and then for gas-filled lamps.

On pacing off the floor we find that the room measures 30 ft. by 60 ft., which means an area of 1800 sq. ft.

Looking at Table I under "Book-binding, folding, etc.," we find that an intensity of 2.0 to 3.0 ft.-candles is desirable, and also that 0.5 to 0.75 watts per square foot is needed to produce this illumination. Taking the higher value of 0.75 watts per square foot, and multiplying this by 1800, the number of square feet, we get $(0.75 \times 1800) = 1350$ as the total wattage of Mazda B lamps needed. Therefore if we want to use 100-watt Mazda B lamps, 13 or 14 lamps will be required.

If, now, instead of the ordinary older-type Mazda B lamps we prefer to use the newer, more efficient Mazda C units we find on looking in Table II,

first column, that the Mazda B watts per square foot 0.75, will be equalled by 0.60 watts per square foot with 100-watt Mazda C lamps, or 0.51 watts per square foot with 200-watt lamps. With the area of 1800 sq. ft. the total wattage allowance with 100-watt C lamps would be (1800×0.60)

$= 1080$ watts, or with 200-watt lamps $(1800 \times 0.51) = 918$ watts. Therefore ten or eleven 100-watt Mazda C lamps, or four or five 200-watt lamps will be required—the size and number of lamps depending upon the spacing, outlet arrangements, and so forth.

Competing on a Basis of Quality and Service

(Continued from page 264)

ommendation of their architects in the selection of the contractor as in the matter of plans and design.

The contractor has a wonderful opportunity to study and compare different architects and their methods, and all contractors of experience know that the most successful architects are those who do not fear their clients and who insist on treating contractors with fairness; within limits, the more arbitrary and positive the architect is, the more he is respected by his client. The client engages him to plan, to choose, and otherwise to render expert advice. If he always defers to his client he stands in his own light and can never expect to be pre-eminently successful.

A clear-sighted and able architect will not, for his part, scorn to take suggestions from the contractor, and it is obvious that in general things will work out to the best advantages if each is candid with the other as well as fair and straightforward.

To this should be added that the architect, instead of always having as his sole object to obtain for his client the lowest possible price from the contractor, should be equally insistent that the latter be paid fairly for the work installed and for his services in doing it. The architect should recognize that the administrative part of a contractor's organization is as much a part of the work as are the labor and material, and good service should be paid for as well as good work.

In almost all buildings extras are unavoidable, especially with some of the trades, such as electric wiring work. The architect almost never realizes how much extras cost, and often the contractor does not. The cost of the actual direct labor and materials entering into a change is comparatively easy to determine, but few contractors, and almost no architects, appreciate the indirect expense involved.

Not only do extras interrupt the orderly progress and regular swing of the contract work, often at a large direct extra cost for labor to the contractor, but also the special overhead expense in looking after extras is disproportionately large. In fact, the office expense and the interruption cost of an extra is often more than the measurable cost of labor and materials used.

In conclusion, then, if the architect will use his experience and judgment in selecting a contractor who does good work and who gives good service, and if he will recommend a fair rather than the lowest price for the work, he may be assured he is serving his client, from the ultimate standpoint, in the very best way.

TABLE II—"WATTS-PER-SQUARE-FOOT" VALUES FOR MAZDA B AND MAZDA C LAMPS ON BASIS OF EQUAL LIGHT OUTPUT AND EQUIVALENT REFLECTOR EQUIPMENT

Mazda B Watts- per-sq.-ft.	CORRESPONDING WATTS-PER-SQ.-FT. FOR MAZDA C LAMPS OF VARIOUS STANDARD SIZES, 110 TO 125-VOLT CLASS								
	75	100	150	200	300	400	500	750	1000
0.1	0.08	0.08	0.07	0.07	0.06	0.06	0.06	0.06	0.05
0.2	0.17	0.16	0.15	0.14	0.12	0.13	0.12	0.12	0.11
0.25	0.22	0.20	0.18	0.17	0.15	0.16	0.16	0.14	0.14
0.3	0.25	0.24	0.22	0.20	0.19	0.20	0.19	0.17	0.16
0.4	0.35	0.32	0.29	0.27	0.25	0.26	0.25	0.23	0.22
0.5	0.43	0.40	0.36	0.34	0.31	0.33	0.31	0.29	0.28
0.6	0.52	0.48	0.44	0.41	0.37	0.39	0.37	0.35	0.33
0.75	0.60	0.60	0.55	0.51	0.47	0.49	0.47	0.44	0.42
0.8	0.69	0.64	0.58	0.55	0.50	0.52	0.50	0.47	0.44
0.9	0.78	0.72	0.66	0.62	0.56	0.59	0.56	0.53	0.50
1.0	0.87	0.80	0.73	0.68	0.62	0.65	0.62	0.58	0.55
1.1	0.95	0.88	0.80	0.75	0.68	0.72	0.68	0.64	0.61
1.25	1.08	1.00	0.88	0.85	0.77	0.82	0.77	0.73	0.70
1.4	1.2	1.11	1.02	0.96	0.87	0.91	0.87	0.82	0.78
1.5	1.3	1.20	1.10	1.03	0.93	0.98	0.93	0.88	0.83
1.75	1.5	1.39	1.28	1.20	1.09	1.14	1.09	1.02	0.97
2.0	1.75	1.59	1.46	1.37	1.24	1.30	1.24	1.17	1.10
Total Lumens per Watt Used in Determining the Above Values									
10.00	11.53	12.57	13.66	14.61	16.11	15.32	16.11	17.10	18.00

Where the reader already knows the watts-per-sq.-ft. required with Mazda B lamps for a given job, he can use this table to find the watts-per-sq.-ft. value for equal illumination with Mazda C lamps. For example: Note in the last line, Table II, that 2 watts per sq. ft. with Mazda B lamps will be equalled by 1.75 watts-per-sq.-ft. with 75-watt Mazda C lamps; 1.59 with 100-watt C lamps; 1.24 with 300-watt C lamps, 1.10 with 1000-watt C lamps, and so on for intermediate sizes. To produce 8 foot-candles in a machine tool shop where fine work is done (referring to the second last line, left, Table I), would require 2 watts-per-sq.-ft. with Mazda B lamps. If Mazda C lamps are to be used, this 2 watts-per-sq.-ft., as shown on the last line in Table II, can be supplied with either 1.75 watts-per-sq.-ft. in 75-watt Mazda C lamps or 1.59 watts-per-sq.-ft. in 100-watt C lamps, and so on across the columns to 1.10 watts-per-sq.-ft. with the 1000-watt Mazda C lamps, provided, of course, that such a large-size lamp could be used to equal advantage.

"SUPER-SALESMANSHIP"

"The Super-Salesman Is a Man True to the Interests of His Customer, and Whose Supreme Purpose Is to Make the Customer See the True Virtues of the Goods He Is Selling"

By CHARLES M. SCHWAB

Chairman of the Board, Bethlehem Steel Corporation

THE highest salesmanship consists in making a buyer understand the true merits of the article you are seeking to sell. My experience has taught me that the effort to make a man buy something he does not need, in the long run defeats its own purpose.

The great salesman must have profoundly at heart the interests of his customer, for no business can develop except as it promotes the interests of those who use its goods or its services. In salesmanship the greatest possible unselfishness is the most enlightened selfishness.

The super-salesman will not only study the immediate needs of his customers, but he will provide against those needs even before the customer realizes that they exist.

* * *

I have had some experience as a salesman, and I have found that it is a great deal easier to sell a big thing than to sell a little thing. It was easier to sell the Carnegie Steel Corporation to Mr. Morgan for \$500,000,000 than it would be to sell a \$100 piano to a farmer who was not interested in music.

"DELIVERING THE GOODS" AFTER MAKING THE SALE

One of the greatest elements of skill in a salesman is to create in the mind of the customer the thought that the salesman will in fact be able to produce the goods which he is trying to sell. The samples may be fine, but the customer must know that the *man* in the factory *behind the samples* will also do his part to the uttermost.

At the outset of the war in Europe, I called on Lord Kitchener and Admiral Fisher. They wanted great quantities of war materials. They wanted Bethlehem to make them. It did not take any skill on my part as a salesman to induce the British Government to give Bethlehem these contracts, but it did take a great deal of effort on the part of Bethlehem to develop that thoroughness of organization and skill in management all down

the line, which made the British Government feel confident that we could deliver to them the material they wanted, and which we promised.

Later on in the war Mr. Grace, president of the Bethlehem company, negotiated a single contract with the Allies for \$84,000,000 worth of shells. That was the largest single order ever given up to that time to one company. Mr. Grace did not have to work very hard to persuade the allied governments to buy those shells, but he did have to work to a supreme degree to prepare far ahead of time to be able to deliver those shells, and then to do the job on time after he got the contract.

The supreme salesman, furthermore, must be a man who can not only make the customer want to buy, but who can also make the salesman's own producing organization equally enthusiastic to deliver the goods.

That is something new in salesmanship. I may induce you to buy large quantities of goods from me, but unless I can induce my organization, down to the humblest workingman, *to want to produce* those goods, *economically and efficiently*, my skill in selling you the goods is wasted.

It is easy enough to sell goods if the price is made very low. Good salesmanship means getting a good price for good material. I make it a point in our companies to have the salesman personally participate in the profits based on their individual sales. It is not always the best salesman who sells the greatest quantity of goods, but it is the best salesman who sells the greatest quantity at the best price.

OPPORTUNITIES AT END OF WAR GREATEST IN HISTORY

The opportunity for the salesman in that new world which will confront us at the close of the war will be one of the great openings of all history. Up to now we have been largely concerned with our domestic problems both in politics and in business. The end of the war will find us engaged

in world politics, in international trade, and in world affairs on the largest possible scale.

SUCCESS NOT IN FAILURE OF ONE'S COMPETITORS

The salesman of the future will not be merely contented to triumph over his competitor. We are entering an era of co-operation where we are beginning to see that the success of any business does not consist in failure of its competitors. I understand that a year after the Simmons Hardware Company opened its offices in Philadelphia, not only was its own business very much larger than it had anticipated, but the business of every other hardware firm in Philadelphia had increased.

The super-salesman is a man true to the interests of his customer and whose supreme purpose is to quicken the imagination of his customer and make the customer see the true virtues of the goods the salesman is selling; the super-salesman foresees the needs of his customers and provides against those needs in full faith that the event will justify his foresight; the super-salesman puts his ideals above his profits, in full confidence that profits will surely accrue to fine ideals intelligently executed; the super-salesman places his all at the disposal of his country in its hour of need, and now looks forward eagerly to the coming of peace and the opening of the greatest era of constructive effort and rapid development of civilization which mankind has ever known.

Mr. Schwab has often been called "the world's greatest salesman," and in his broad vision and daring initiative himself typifies—probably better than any other man—the very definition of the "super-salesman" he gives above. Starting life as a mine-boy, he rose by sheer ability to be president of the billion-dollar United States Steel Corporation. Afterward, resigning to become head of the then run-down Bethlehem Steel Corporation, he has in a few years made Bethlehem not only the leading independent steel company, but has built up there an industrial group capable of turning out 50 per cent more product than even the famous Krupp plant at Essen. The remarks here quoted are extracted from an address by Mr. Schwab before the World's Congress of Salesmanship at Detroit on the eleventh of this month.

Typical Industrial Lighting Jobs, with Notes on Layout and Fixtures



Fig. 1—For wide bays such as are found in the factory of the Hurley Machine Company, Chicago, reflectors of more flaring types are used, with 200-watt Mazda C lamps, one lamp per bay of 16 ft. by 18 ft.; 0.7 watt per square foot, ceiling 12 ft., lamps 10 ft.



Fig. 2—An old open-wiring job with unprotected droplights, replaced by an efficient installation of 100-watt tungsten lamps in deep-bowl reflectors. Room 60 ft. by 148 ft.; 0.3 watt per square foot



Fig. 3—A machine shop using opal diffusers and practically eliminating shadows on the floor. Localized general illumination using 200-watt Mazda C lamps; maximum 1.5 watts per square foot for five lamps; average for nine outlets, 0.74 watt per square foot

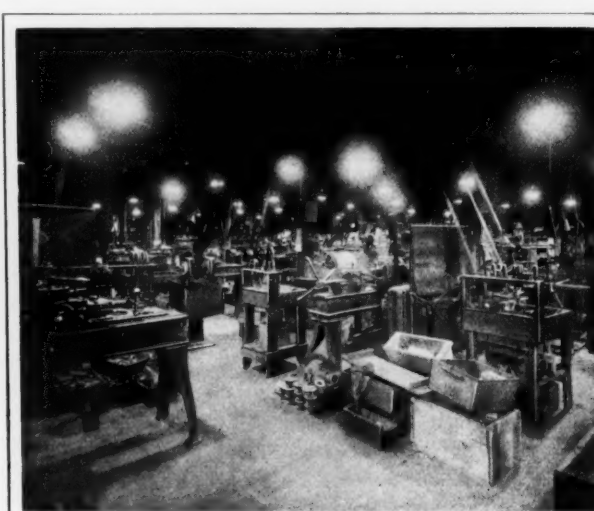
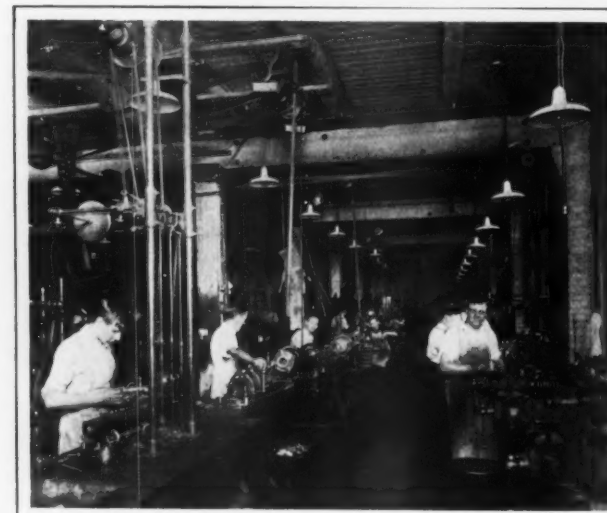


Fig. 4—The Federal-Huber Company's machine shop in which sixty 100-watt tungsten lamps are used in deep-bowl reflectors. Note how efficiently the light is delivered downward onto the working plane, producing a high intensity on and about the machines



Figs. 5 and 6—Daylight and electrically-lighted views of the shop of the Benjamin Electric Manufacturing Company, Chicago. From these pictures it may be seen that the detail in the night view is more distinct than in the daylight picture. General illumination from 100-watt Mazda C lamps over benches 9 ft. from floor on 8-ft. centers, with 14-in. shallow-dome one-piece enameled-steel reflectors. Throughout balance of floor 60-watt Mazda B lamps in rows on 8-ft. centers; lamps 9.5 ft. from floor 1.15 watts per square foot

Arguments to Help You Sell Factory Lighting

A Forceful Yet Easily Understood Line of Talk Which Can
Be Used by the Electrical Contractor or Electric Lighting
Salesman in Working for Better Industrial Illumination

By J. J. KIRK

THE fundamental principle of good industrial lighting is recognition of the fact that light sources are a means to an end, and not the end itself. Good lighting is that which produces good seeing. In order that the light may produce this effect the light itself must come from concealed sources.

In machine shops, for instance, these principles should be observed with special care. There are few other shops, however, in which it is so consistently violated. Obvious as the principle itself is, its force is not recognized, partly in consequence of unthinking adherence to errors that were less serious in the carbon filament lamp period, when low candle-power lamps were commonly used without reflector equipment.

A striking example of this is the persistence with which the average machine-shop owner clings to the use of local lighting units for artificial illumination. Some managers are aware that a system of this kind handicaps the workmen with regard to both safety and production, yet against their own better judgment they often yield to the demands of the workmen for local lighting units affixed close to the working points. In all too many cases of this kind no reflector equipment is used to protect the eyes. Wire guards are often provided to protect lamp breakage, but these afford no protection to the eyes. From this it might almost be inferred that the breakage of an inexpensive lamp is considered more important than an injury to the workmen's eyes—organs that are irreplaceable at any price, and that are the greatest protection against accidents that may befall mankind.

It is important for the machine-shop owner to realize that unshaded local lights are inefficient and harmful, and that they must be scrapped in the same way that obsolete equipment of other kinds is scrapped. Every machine shop that is equipped with an unshaded lighting system is losing money through two channels: through low

production attended by high percentage spoilage, and through a high accident hazard and therefore a needlessly high accident rate.

The evil of poorly designed machine-shop and other industrial plant lighting is by no means confined to unshaded lamps. Lamps may be equipped with suitable reflectors, but may cause specular reflection on account of improper suspension height. Specular reflection is particularly objectionable because it produces the same kind of effect that is caused by placing a source of illumination in front of the eyes.

A particularly annoying, yet typical violation of this principle, consists in placing a lighting unit with a proper reflector equipment over a milling machine in such a position that when a fine cut is being made the bright metallic surface will reflect the light into the workman's eyes. His vision is interfered with and he is quite likely to think that the remedy consists in providing a supplementary local light. He usually asks for one and receives it, perhaps without any reflector equipment whatever. This in no sense cures the ill, but rather intensifies it, because, while formerly he had one unit causing specular reflection he will now have two, and in addition one will shine directly into his eyes.

The remedy consists in employing a man who understands lighting and equipping the place with lighting units in accordance with his specifications. A competent lighting authority will see that the lighting units are installed in such a way that there will be no serious eye irritation, either from direct rays from the lamp or from specular reflection. The cost of making a change will be negligible in comparison with the benefits obtained.

These benefits are commercial as well as humanitarian. Throughout the industrial world the goal of industry is increased production and reduced expense, at the same time maintaining or improving quality of production. In order to reach this

goal the work must be done with the greatest possible efficiency. The main elements considered to reach this high efficiency are material, machinery, labor and light. These four factors are so closely related that the omission of any one would render all the others of no value. In equipping a plant no expense is spared to obtain the most efficient machinery or tools, but in the majority of the cases the lighting is considered of no consequence. The cost of illumination, however, is only a small consideration for the advantage gained from it. Statistics prove that the cost of good lighting can be covered by 1 per cent of the workmen's wages. Moreover, good lighting produces an average increase of 5 per cent in the output of those industries examined.

Statistics covering the iron and steel industries of the United States from 1905 to 1910 show that 40 per cent of the accidents occur during the day and 60 per cent at night. In the yards where large areas are to be lighted and shadows are very heavy 30 per cent of the accidents occur during the day and 70 per cent at night. By actual tests and experiments it has been found that 25 per cent of all these accidents were avoided merely by correct illumination.

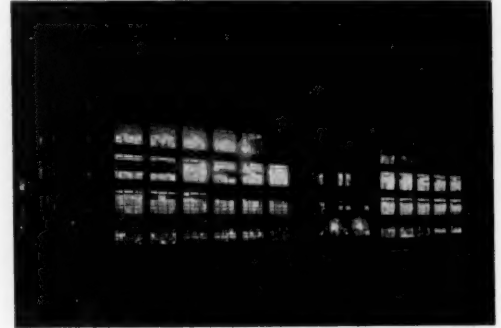
In addition to this the United States Census Department data show that the annual spoilage due to poor manufacturing is \$150,000,000 a year, of which 20 per cent is caused by poor lighting.

In summing up the arguments which may be used in favor of good illumination the following points are leaders: Increased production from the same labor cost, increased efficiency, reduction of spoilage, reduction of "seconds" or injured goods, greater accuracy in workmanship, better products, reduction in the number of accidents, less eye strain, improved health conditions of employees, more cheerful surroundings, greater comfort for workmen, more order and neatness in the shop, and easier supervision of men on dark days and nights.

Estimating the Cost of a Factory Lighting Job

How the Contractor's Figures Were Prepared for Bringing an Old Style Factory Lighting System Up to Date

By JOHN W. HOOLEY



THE electrical contractor whose work in a moderate-sized town has, until now, brought him no more important contract than a large house-wiring job is a subject for congratulation rather than sympathy. His opportunity for expanding his business lies directly before him.

Summer is the time when every factory manager in the country is going to think about repairs and overhauling and about higher oper-

playing six men to the steel mill paying 6000.

How to handle such work at a price that will make the deal economical for the factory owner and profitable to the contractor is a problem whose answer is contained in two words—*careful estimating*. Estimating is too often confused with *approximating*. An estimate can be made as true to detail as the ground plan of a toothpick. Any time spent in making it so should be classed as an investment rather than a speculation.

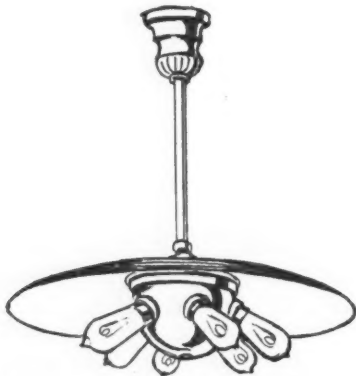
Suppose we take a concrete case and tack our estimating hints on it as we come to them. We'll say, to begin with, that in Contractor Bill Jones' town there is the factory of the C. O. Davis Company, which was built some years ago. The lighting system which was installed at that time was modern and was made up largely of clusters of six 16-cp. lamps. There were 200 of these clusters in the factory.

Bill Jones knew that light was costing the factory too much money and decided to go after the job of modernizing it. Armed with a good factory fixture, a 100-watt type-C lamp, and a wattmeter, Bill called on the owner, and secured his attention by offering to improve his light and reduce its cost at one operation.

Figures talk. Bill showed Mr. Davis that his 16-cp. lamps were rated at 3.5 watts per candle. That meant that each lamp used 55 watts and each cluster of six required 330 watts, for which it delivered 96 cp. At a lower cost for electricity the new unit Bill offered would give more light. To prove his statements he offered to mount his sample fixture anywhere in the factory, and to use his wattmeter on old and new units.

Facts plus salesmanship won him the request for an estimate on the re-lighting of the entire factory.

Bill made a sketch of the first floor plan and noted the location of the old units. He found that the wiring was in good condition, and that the fixture stems of the old units were adaptable to the new lamps by



The old lighting system of the factory was made up of clusters of six 16-cp. lamps, each of which required 55 watts

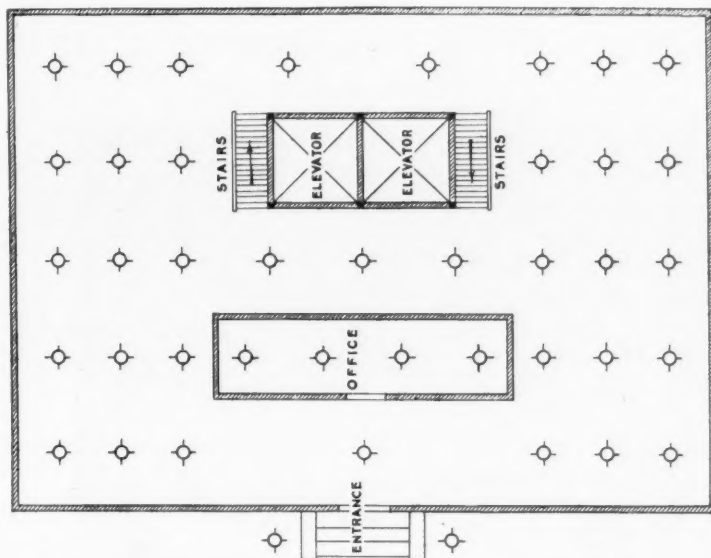
ating efficiency and the changes in equipment that will tend to cut production costs. Lighting equipment is a factor in the expense problem. The smaller the factory concerned, the more likely it is to be using a type of illumination whose proper replacement would result in more light at lower cost. There are, however, plenty of rule-proving exceptions—big modern shops with the latest type of motor-driven machinery, and staring, exposed lamps to hypnotize the workers into a daze of low capacity. It will pay every electrical contractor to look about his town and find out how every industrial building is lighted, from the creamery em-



The new 100-watt units gave more light than the clusters, at less cost and were adaptable to the old fixture stems

removing the cluster bodies and attaching the new fixtures and reflectors. Pendant switches, he decided, would be advisable, since they would make it possible to turn each unit on and off as needed, thus saving their cost in a short time when used in a section where only one or two of the machines were operated at a time.

Then he entered on his estimate sheet under his "Description" column 200 each of fixtures, lamps, pendant switches and fiber bushings for wire entrance protection. The cost of each of these items he placed in the "Material" column, and for his "Labor" cost he consulted his note-



Bill sketched the general layout of the first floor and marked down the approximate locations of the old fixtures

book where accurate figures from other jobs gave him ready data on installation.

Seven and a half feet of reinforced cord would be required for each unit, and Bill entered the total for the job, or 1500 ft., with the cost. To this he

added rubber tape, friction tape, solder and soldering sticks, and his material list was complete.

Then he happened to think that before he could install the new fixtures the old ones must be removed carefully—which meant another

labor charge. Summing up his labor and material, Bill found his total to be \$1,246.95. Above this he charged his overhead of 20 per cent, which in this case would have to include interest on borrowed cash to buy his fixtures. Then he added his overhead charge to his labor and material cost before computing his 10 per cent profit. Profit is a legitimate charge on the job as a whole and should never be based on any part of that amount. This gave a total bid of \$1,646, and when he closed the contract on that figure Bill had the satisfaction of knowing that he was giving square treatment to his fellow contractors, his customers and himself.

Signal Corps Needs Electrical Men

Several thousand trained electrical men, particularly those experienced in telegraph, telephone and radio work, are needed by the Signal Enlisted Reserve Corps of the United States Army. Work in this division offers an excellent chance for instructive employment in the country's service. At the present time ten field battalions are being organized in the Eastern Department of the Army and mobilization is expected soon. The electrical work of the Signal Corps Battalion is to maintain telegraph, telephone and radio communication, besides carrying on visual signaling in which wig-wag and semaphore flags and heliograph are used in the daytime and at night flashlights and lanterns. The Enlisted Reserve Corps is composed of men from eighteen to forty-five years of age, and in time of peace only fifteen days' annual service is required. In war time a division may be called out at the discretion of the President. Applications for enlistment may be made to signal officers in the various divisions of the army as follows:

Eastern Department, Army Building, 39 Whitehall Street, New York.

Central Department, Federal Building, Chicago, Ill.

Northeastern Department, Nottingham Chambers, Boston, Mass.

Southeastern Department, People's Bank Building, Charleston, S. C.

Southern Department, Fort Sam Houston, San Antonio, Tex.

Western Department, San Francisco, Cal.

Architect -----

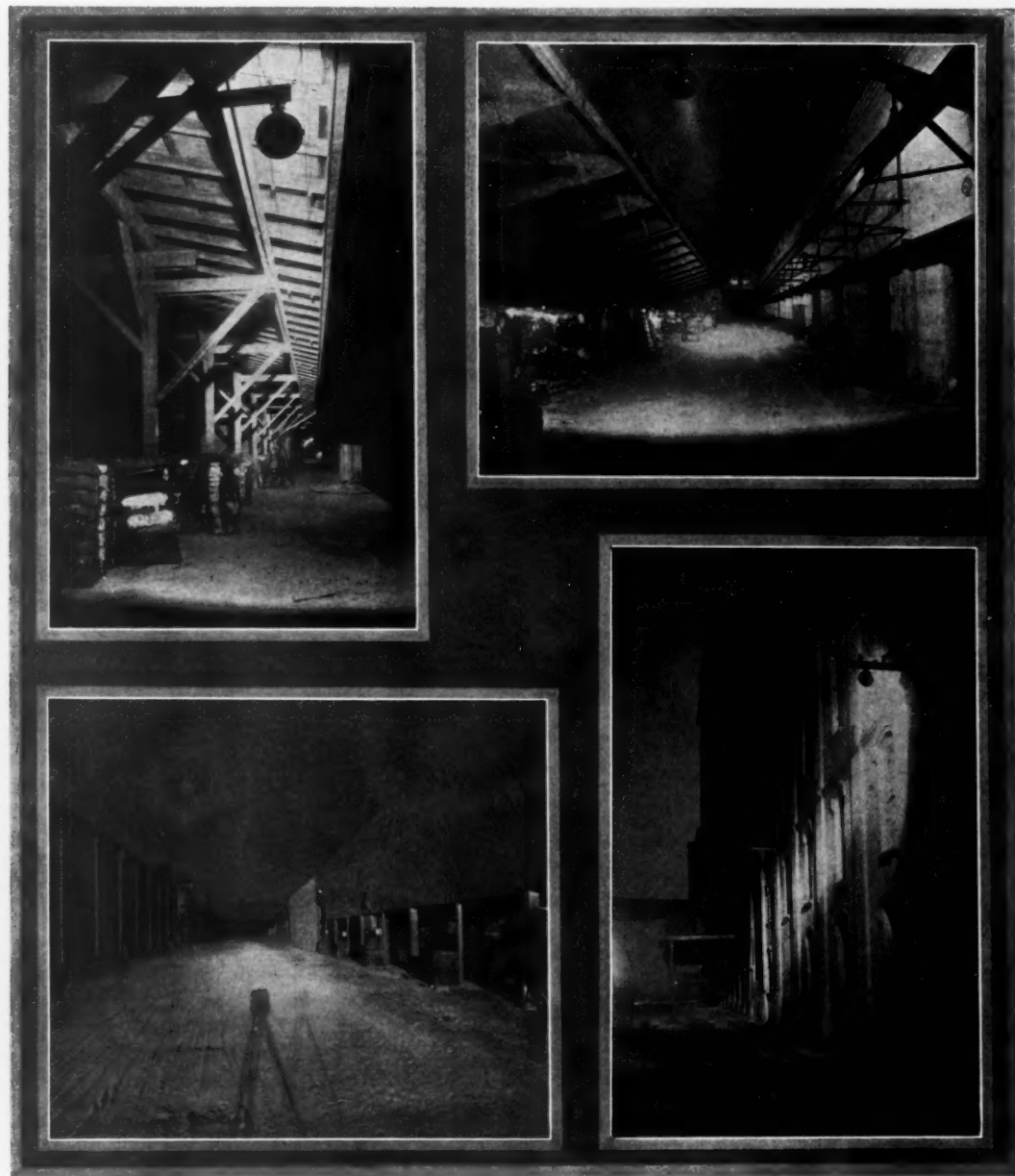
Scale -----

May 4-17 - Estimate to C. D. Davis Co. - factory lighting system

	DESCRIPTION	MATERIAL	LABOR
200	- #387 B fixtures complete	300	600.00
200	100 Watt 110 V C. Lamps	100	200.00
200	pendant fixtures	50	100.00
200	flex bushings	20	40.00
1500	ft #14 Reinforced Cord	04	60.00
10	lbs friction tape	50	5.00
5	Rubber	70	35.00
10	lbs solder	40	40.00
3	soldering sticks	15	45.00
	taking down 200 clusters		
	holders		100.00
		976.95	270.00
		270	
		1246.95	
	Overhead - 20%	249.39	
		1496.34	
	10% Profit	149.63	
		1645.97	
	Bid	1646.00	

After every item of material and labor had been entered on the estimate 20 per cent overhead was charged in. Then 10 per cent profit was figured upon the resulting total

Figuring "Police" Floodlighting for Industrial Plants



The inexpensive and rapid method of installing wiring and fixtures possible with such a floodlighting job is well illustrated in the upper left-hand picture

Lighting the street between two sheds is an inexpensive form of insurance against incendiary fires

One lamp lights a stretch 700 ft. long. Each projector in this installation is arranged so that the watchman making his rounds always has the light at his back

It would be difficult for a marauder to approach this flour mill without being detected

Many contractors are finding important work to do, these days, in the suddenly-developed field of protective or police lighting by means of floodlamps, now that many industrial plants are surrounding their properties with zones of light to prevent the approach of evildoers. Compared with the ordinary socket job required to light a factory yard, floodlighting is far less expensive to install and can be put in place in a fraction of the time needed to install an ordinary socket job.

One contractor with considerable experience in this work bases his estimates on a figure of \$50 per floodlight unit and 20 cents per foot for circuit runs in conduit. The latter includes allowances of 6 cents per foot for conduit, 3 cents for wire, and 6 cents for labor.

There are many opportunities for installations of even one and two floodlamps about smaller shops and factories, and in offering his estimates for such work the contractor should not fail to point out the fact that such a floodlighting job at \$100 or \$150 may save the customer \$400 to \$500 required for an adequate socket job, besides making ready in a day or two an installation that would otherwise take several weeks to put in.

The pictures above show how 200-watt floodlamps are being used at Galveston, Tex., to protect cotton presses, flour mills, wharves, railroad tracks, cottonseed mills and other industrial plants. They are also being used to illuminate flags and golf links, and it is even planned to floodlight the beach for night bathing.

FINDING THE COST OF CONDUCTING BUSINESS

The Electrical Contractor's "Overhead" and Its Importance in Figuring Prices That Will Bring Profits — The Expenses That Must Be Allowed for Under "Overhead"

By EDWIN L. SEABROOK

HOW much does it cost to conduct business, of what elements is this "overhead expense" made up, and how do these cost elements themselves originate are vital questions to every electrical contractor. Important as is this subject of "overhead," it is applied by some, understood by others, but misunderstood, misapplied, and unheeded by many more. The profits derived from the electrical contracting business depend upon a knowledge of this cost of conducting business, its origin and its proper application to estimates and prices.

Every price for electrical construction or repair work involves four elements:

Cost of material.

Cost of labor.

Cost of conducting business, or "overhead."

Profit.

These factors seem self-apparent, but practical experience clearly demonstrates that many contracts are made and prices offered without consideration being given to the third and sometimes even the fourth element. No intelligent estimate or price can be given unless each of these four elements is definitely known.

What would be thought of any electrical supply house that received a carload of supplies, tore up the invoice prices, and told some subordinate to mark the selling price on each article; or an electrical contractor offering to perform a certain piece of work for a certain sum, admitting that he did not know the amount of material required, or another contractor willing to do a piece of work for a definite amount, without considering the amount of labor required? Would these be compiling their prices in any more haphazard way than the electrical contractor who has no definite idea as to what it is costing him to conduct his business, or the proportionate amount of such "overhead" that should be added to

every estimate or piece of work performed?

In every contract or piece of work carried out, the cost of conducting business exacts a certain charge, and the amount of this "overhead" can be just as definitely determined as the material or labor required. Of course, every contractor includes material and labor and a profit, but many unwittingly delude themselves as to the true nature of the transaction, because the third item—overhead—is not taken into account.

Many contractors and other business men seem to have the impression, when the subject of cost accounting is mentioned, that they are being led into a field of complicated, technical and elaborate bookkeeping, requiring expert accounting. For the ordinary electrical business nothing is further from the facts. A simple bookkeeping system, which can be installed and kept by any one who has some knowledge of the first rudiments of making proper entries, will answer all purposes.

WHAT THE CONTRACTOR'S BOOKS SHOULD SHOW

It is impossible to ascertain the cost of conducting business without a proper set of books. But the great defect in the bookkeeping of many contractors is that it shows only one thing—how much is due the firm from others. The proper bookkeeping will not only show how much is due the firm and owing by it, but the operating results of the business. It will show how much was disbursed, and the identical items for which these were made. It is possible to have bookkeeping without any cost accounting in it, but it is not possible to know the cost of conducting business without bookkeeping.

Perhaps some one will ask: "Why all this agitation nowadays about the cost of conducting business? The contracting firms years ago knew nothing about this expense, yet made money." This may be true in a sense,

but there never was a time when any business could be managed without expense. Where there has been competition among well-conducted manufacturing establishments there have been cost systems; the keener the competition, the more efficient the system.

Business is being managed to-day on more scientific lines, or, in other words, on more exact knowledge of the details of each transaction. Years ago there was more leeway between cost and selling price; contracts were made or estimated upon in a more or less haphazard manner, and conditions allowed a much wider margin of the so-called profit that went with these methods. It is a well-known fact that all lines of business to-day are transacted on smaller margins than formerly. The greater the volume the smaller the profit on each unit. The unit of profit narrows as production increases. An electrical contractor will ask a certain profit for wiring one house. If he has a hundred houses to wire, he will be content with a smaller unit of profit per house. From this it will be seen that as the demand increases competition becomes a little keener, and the margin between cost and selling price narrows, the profit on the unit is small. Economic agencies are forcing a narrower margin between cost and selling price, the unit profit is getting just a little smaller as the volume of business grows larger. These are facts that must be apparent to any one who will take a little time for study, investigation and comparison.

In every transaction there is a definite point at which cost ends and profit begins. The simple diagram on page 276 illustrates this, showing the four component parts of every price.

The first three elements of cost—material, labor, and "overhead"—are linked together and form the first cost. The fourth—profit—is joined to these, and the four comprise the

completed transaction or selling price. It should be noted that the first three of these items are fixed; that is, in every piece of work performed or contract completed, the total of these three comes to an unyielding, inflexible amount represented by a line. No matter what the selling price may be, this amount must be exacted from it before there is any profit. Between this line and that of the completed transaction or selling price there is a margin of safety or profit. This statement must not be construed to mean that there can be no variation between the estimated amounts of these three parts and those actually used in the performance of the transaction, but that in the very nature of the transaction

throughout the year. These dollars that are sent out in the many different directions come back in the form of a price that is set upon a combination of material, labor, expense—the latter invisible, but very real—and profit, if there be any. In this process of coming and going these messengers may increase or decrease, lose part of themselves, or come back with a companion, depending entirely upon the amount of work given them to do. They will come back just in proportion to the amount of them that it takes to perform the completed transaction at the price asked for it. If more are asked to come back than were sent out, there will be an increase. If the task imposed has been too difficult, if less were put into the

The outgo will be for the first three parts of the price—material, labor and cost of conducting business or "overhead expense."

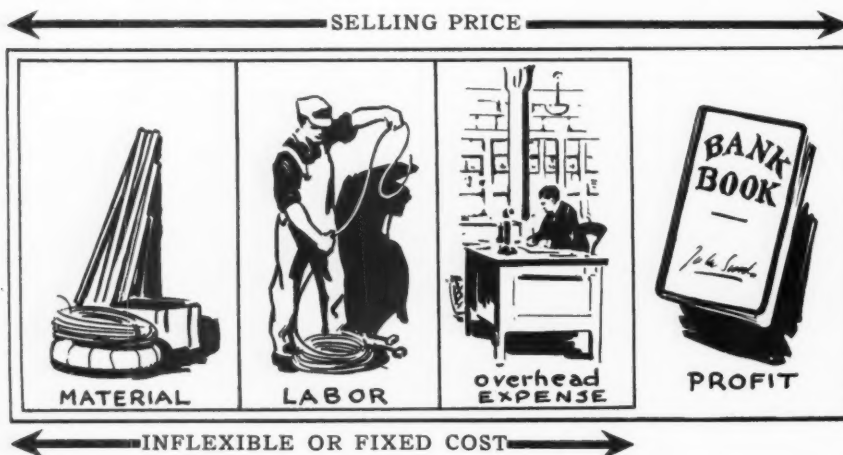
THE ELEMENTS OF "OVERHEAD"

The question naturally arises: What are the elements that make up or enter into overhead? These are clean-cut and can very easily be determined. The great difficulty is that most men in any contracting line deceive themselves as to the real nature and amount of these overhead charges. Some think that they are quite small, and do not amount to a great deal, because they have never taken the trouble to make a complete list and amount of these cost items. A contractor in one of the building lines in Rockford, Ill., told the writer that he had found forty-nine items of overhead, and was not sure that he had discovered all of them. The experience of electrical contractors who have dug deep enough into this matter of overhead will tally with that of the Rockford firm. No business can be conducted without this overhead. The moment the business is started, overhead begins and goes on day and night, every day in the year, increasing as the volume of business grows larger.

There are certain overhead expenses inherent to every business. In preparing a list of items that compose the cost of the electrical contractor it is not possible to fit the exact conditions to the individual business. There will be some variations, but these will be slight, and not affect the principle or general proposition. In point of accuracy each individual business must prepare its own lists of overhead items and amounts from its records and experience. For all practical purposes in the electrical contracting business, a fairly accurate list of overhead items can be prepared, and with slight variations to fit the individual case these can be used in determining the overhead.

Every electrical contracting business has, without regard to size and with practically few exceptions, the items of "overhead" shown in the table on page 277.

No figures have been given for these respective items, because no two men would agree as to what these amounts should be. No two would have the same experience even though they kept an accurate record. It is a matter of individual determination,



There can be no profit for the electrical contractor until the selling price of the job passes the "cost line" which, as above shown, is definitely fixed by the outlays for material, labor, and the cost-of-doing-business or "overhead." The electrical contractor, like any other business man, must heed the advice of the U. S. Federal Trade Commission and "know his costs," which costs include the many and often-overlooked items of "overhead," besides material and labor alone.

when these parts of it are completed, there is an inflexible amount demanded from the selling price.

Is it not, therefore, absolutely essential to the safety of the business to know where cost ends and profit begins? The electrical contractor who knows this is able to intelligently name his selling price. From the foregoing this axiom may be deduced:

To name an intelligent and adequate selling price it is absolutely necessary to know with some degree of certainty the cost of conducting business or "overhead."

THE DOLLAR MESSENGER

Every electrical contractor sends out his dollars each day. Some of these go for labor, material, his own salary; others for a hundred different things, and the process goes on

price than must be sent out, there will necessarily be a decrease in the returns.

It becomes essential, therefore, to know where and how many of these dollar messengers were sent out, and to check the number returning from each transaction. A messenger once lost can never be found; it can only be replaced by increasing the return of those sent afterward. Business intricacies prevent the following of each dollar as it plays its individual part in the transaction. Combination of dollars are, therefore, sought; comparing the number of dollars going into any one transaction, and the number that must be returned in order to find the basis to ascertain the profit. The necessity for tracing the dollars from the time they are spent until they come back is very clear.

EXPENSES THAT GO TO MAKE UP "OVERHEAD"

Rent	\$.....
Insurance (fire, liability, accident, etc.)	.....
Taxes (city, county, state, federal)	.....
Advertising	.....
Telephone and telegraph	.....
Printing, stationery	.....
Postage	.....
Carfare (where not charged on work)	.....
Shop supplies	.....
Lost time of workmen (time paid for but not chargeable to any work)	.....
Freight (where not added to cost of material)	.....
Light	.....
Heat (gas, coal, etc.)	.....
Power	.....
Depreciation and repair of tools and equipment	.....
Allowances (where a reduction must be made to get settlement)	.....
Hauling and delivery (where a wagon or truck is owned by the establishment. This would include all the cost of operation, such as: drivers' wages, feed or gasoline, repairs, renewals, depreciation, etc.)	.....
Bad debts	.....
Collections	.....
Legal expenses (attorney's fees, etc.)	.....
Mercantile reports	.....
Charities, donations, etc.	.....
Dues (trade organizations, etc.)	.....
Interest on investment	.....
Salaries (Money paid to those for whose services a charge is not made; for instance, bookkeepers, stenographers, porters, errand boys, managers; and owners where the latter do not work on a job; where they work part time, the money they get for the time they do not work should be included in this item)	.....
Total	\$.....

and each business must determine these amounts from its own record and not from guesswork or hearsay, that some one else's was such and such an amount.

One contractor may pay \$25 a month rent; another \$60. One owner may be satisfied with a salary of \$1,200 for himself; another may want \$2,000. The cost of taxes, telephone, insurance, and other items will vary. It might be well to discuss a few of these items.

RENT

The maintenance of a place of business costs something, and is generally termed rent. Every one who pays this knows, or ought to know, that it is a part of the cost. Some who own their property have the mistaken idea that because no rent is paid they are free from this item of expense. If these men were not conducting a business in these buildings they own, the buildings could be rented for a certain sum a month. Those who do not charge the cost of rental against the conduct of the business are therefore simply making their customers a present of these sums, because they own the building.

INSURANCE

Insurance of all kinds is a safeguard, and should be carried by every one. In most States workmen's com-

pensation insurance is a necessity. The premiums are a charge upon the business, and these amounts are a part of the cost.

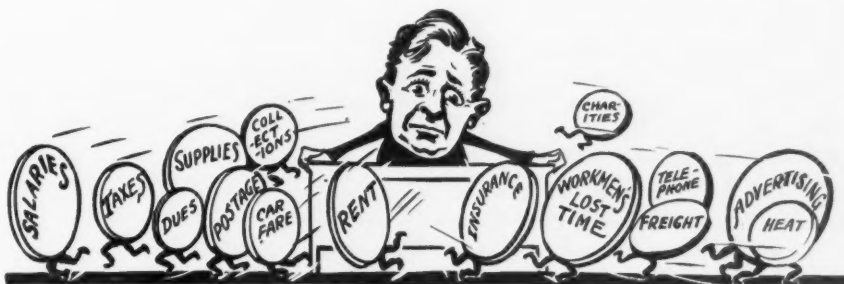
TAXES, PRINTING, ETC.

Taxes, advertising, telephone, printing, stationery, postage, etc., hardly need any comment. Some one may say: "Why charge the business with taxes? It is a personal matter." The existence of the business occasions the tax, and the business should be chargeable with it. The telephone is a business necessity; it costs something; it should be charged to the business. Printed matter, such as billheads, letterheads, envelopes, time cards, are a business necessity and separately cost only a small amount, but collectively they cost quite a sum during the year. A few cents goes daily for postage, not worth keeping an account of, some may think, but

cannot be charged, is inevitable. This is no reflection on the workman, it is inherent to all branches of the building business, and as such should be charged with this lost time in the form of overhead. If an accurate account of this lost time were kept, it would surprise many firms. Like many other business leaks, it creeps up in amount without making any noise to attract attention. The amount depends on the individual business, and each one must ascertain the proper allowance for this overhead item. A good authority in the plumbing business estimates this loss as 5 per cent of the mechanic's time. This loss is very real, and the amount of time unavoidably lost is a proper charge on the business.

FREIGHT

In most cases this item can properly be added to the cost of material.



Every electrical contractor sends out his dollars each day. Some of these dollars go for labor, for material, for his own salary, for rent and heat, and for a hundred different things. Remember, however, that these dollars are "all going out," and that the only way the contractor has to get other dollars to come back to replace them is through the prices he sets upon those combinations of labor, material and overhead, which he calls "a job" and aims to sell at a profit. Only when costs of all kinds—labor, material and overhead—are carefully watched and above these a fair profit is provided for in the selling price of every job, can these dollars themselves come back or bring with them any companion dollars into the contractor's cashbox.

the postage sum for a whole year is often quite surprising.

CAR FARE

Not very much spent at a time, but the total in the course of a year is considerable. The nickels, dimes and quarters are sent out on a business errand, and provision must be made for their return, or the sum spent is a total loss.

SHOP SUPPLIES

Here is a constant source of outgo. Tools, small or large, wear out, or are lost and must be replaced. These are not given to the business gratis—they cost real money.

LOST TIME OF WORKMEN

In any construction business, lost time of the workman, for which he is paid, but for which the customer

If freight cannot be charged as a part of the cost of material, or to a customer, or contract, it should be made a cost item.

LIGHT, HEAT, POWER

These are more or less necessary to the maintenance of the business, and need no explanation. It is well to keep separate accounts for each of these, and all go into the cost.

DEPRECIATION

Equipment and tools are constantly wearing out, and must be replaced. A new machine used but a week is no longer new from a commercial standpoint, and has depreciated in value. How much does it cost to replace shop tools every year? The equipment is wearing away each year, how soon will it be gone, how much will it cost

to replace it? A yearly allowance should be made for depreciation of equipment, so that when it is worn out it can be paid for from these allowances and not from profits. Repairs to tools, etc., should be included in the cost item.

ALLOWANCES

It is hardly possible to avoid disputes and misunderstandings in business. Reductions are often necessary to secure settlements. How much do allowances amount to in the course of a year which are made to secure a settlement, and not because they are justified? In most cases these are a proper charge on the business, and therefore become a legitimate part of the cost.

HAULING

Under this item is included the maintenance and upkeep for the equipment used in carting. This should include the entire cost of operation, such as feed, repairs, shoeing, license, depreciation. The driver's wages should be included. If a portion of his time is given to mechanical work, for which a charge can be made to the customer, this can be deducted.

BAD ACCOUNTS

In the electrical contracting business, which cannot be conducted on a strictly cash-over-the-counter basis, a certain number of bad accounts are inevitable. Some may doubt the justice and fail to see why business losses should be charged to cost. Why make the good customer pay for the losses incurred by the poor one? Such losses are incurred by the business, consequently it is a natural expense, and should be charged to it. This refers to legitimate losses, and not to "wild catting" in granting credit. Speculation and extraordinary losses should be borne personally, but the customary percentage of bad accounts should very properly be charged to cost. Such losses should be averaged for at least five years rather than taking any single year.

TRADE ASSOCIATION DUES

Every business man should connect himself with his trade organizations, local, State and national, and consider such membership as a part of his business. No expenditure he can make will bring so large a return as association dues.

INTEREST ON INVESTMENT

Some raise the question as to the propriety of charging to "overhead" interest on capital, the claim being made that the capital invested is for the purpose of making a profit, and is not entitled to an interest charge. But in the opinion of the writer, since there is a general disposition to make the overhead too little rather than

non-productive are used to classify the two kinds of labor rather than to indicate that one produces and the other does not, for all labor is productive. Those classed as non-productive are a direct charge on the business through the part they take in its management.

THE OWNER'S OWN SALARY

The most important item to be considered in this subject of salaries is the salary of the proprietor. For some reason many do not consider the amount they take from the business as a salary or an expense. They, for some unknown reason, mistake salary for profit. Salary comes into existence the minute operations begin, and oftentimes before. Profit does not begin until the transaction is finished, paid for, completed in every detail. The amount drawn by the proprietor should be charged to "overhead," unless he works part of the time, for which he can charge a customer or contract. Many proprietors may say that they work with their men and charge this time to the customer, that their pay is therefore wages rather than salary, and that this should not be charged to "overhead." This reasoning seems quite plausible, but a little analysis will show that it is deceptive, for very small indeed is the business where the proprietor can devote all his time to mechanical work.

After questioning hundreds of proprietors along this line, it is safe to say that not more than two-thirds of the time can be given over to mechanical work, and the vast majority are not able to put in even one-half of the time in this work. Business makes a demand on the time of the owner to take care of it. An expense is created by this demand, and the business should be charged with it. Unquestionably the salary of the proprietor is the weakness in the cost of conducting business in many establishments. If he can give a part of his time to mechanical work, for which he can make a direct charge, the difference between this and what he draws from the business should be charged to cost. If all his time must be given to management, then his entire salary should be charged to cost.

In the next issue the analysis of a business will be taken up, together with the subject of getting the cost of conducting business or "overhead" into the price.



"MAKING ELECTRICAL CONTRACTING PAY"

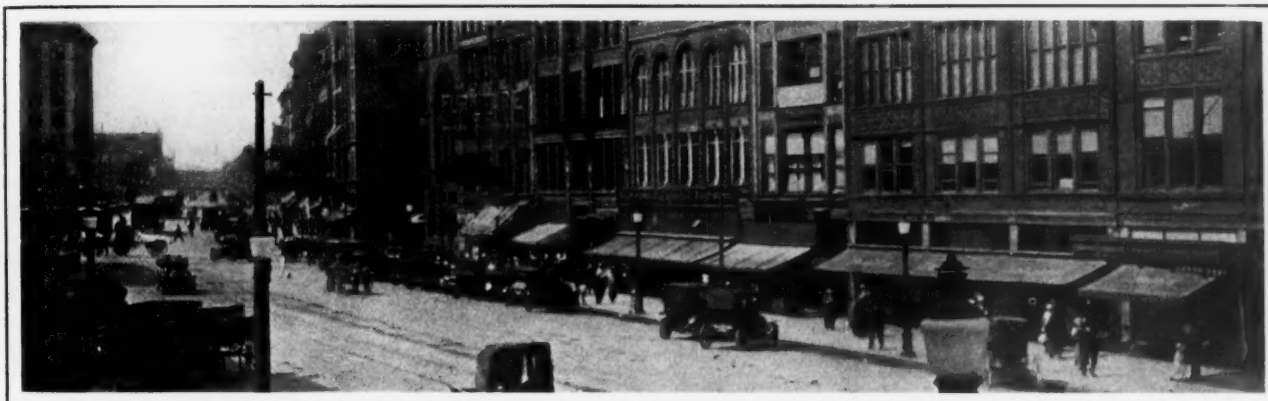
A New Series on Better Business Methods, and a Word about the Author

Mr. Seabrook, who is preparing for "Electrical Merchandising" a series of articles on "Making Electrical Contracting Pay"—of which this is the first—has been closely connected with the building industries for many years. Latterly as secretary of a great trade association he has come into personal contact, in their shops and offices, with thousands of firms in various building trade branches, affording him an unequal opportunity to investigate the business methods of all the building trades, and to apply the best of these to the electrical contractor's requirements.

too much, it might not overload this account to make a reasonable charge for the capital invested.

SALARIES

This item should include amounts paid to the proprietor, stenographer, bookkeepers, superintendent and all others who are not directly connected with the production part of the business. It seems necessary to make two classes of all those—including the proprietor—on the payroll of a business. These are usually termed "productive" labor, such as the labor of workmen, for whose services a direct charge can be made to the contract, or other work being done, and "non-productive," covering the salary charges of those engaged in the management or taking care of the business, for which service a direct charge to any contract or work cannot be made. The terms productive and



Why do the people congregate along streets like this in every town and city? It is because these blocks are looked upon as the shopping center. Location there brings maximum opportunity to every merchant, and the electrical man can have his share of trade by being "on the spot" in easy reach of the general shopper

LOCATING THE RETAIL ELECTRIC STORE

Why "Situation" with Regard to "Buying Traffic"
Is Invaluable—How to Find It—How to Utilize It

By W. E. BAYARD

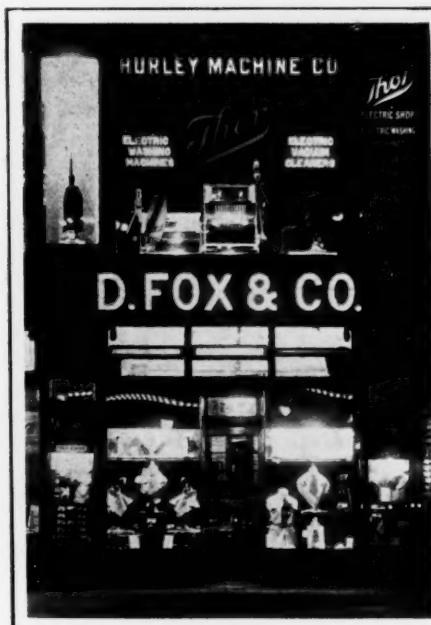
IT seems absurd to talk to men engaged already in the business of electrical merchandising about the value of location for an electric store. Every one of us well knows that trade is better on the busy corner than way down some side street. Yet any man who goes a bit about the country is soon impressed with the number of electric shops that are suffering in so many cities from disease brought on by a wrong environment. It is ap-

parent therefore that more consideration must be given to this all important factor in retail selling.

Many an electric shop has been the outgrowth of the contractor's office or the dealer's store first organized to sell wiring supplies to the local trade, and many have been started in the offices of the lighting companies. Before they branched out as retail stores to bid for the popular interest and custom, the matter of location

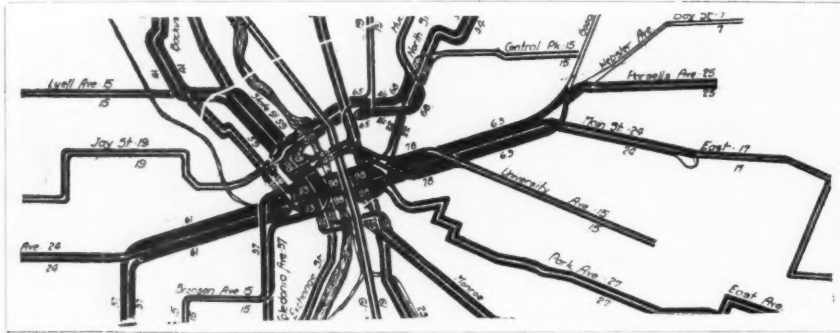
was not so important. The contractor had picked an address convenient to his needs, the dealer wanted to be handy to the contractors who bought of him, the central station often used spare quarters in the plant or in a substation or storeroom building.

But times have changed and purposes have altered. Though it might have been practicable to have the old office in a side street, when it comes to entering the retail market an elec-



Better have a well-situated upstairs store, some say, than a ground-floor location out of the way of the crowd. The curious pass on while buyers come upstairs to buy

Location is primarily a selling force—a salesman standing in a row of salesmen, all with merchandise to offer. How does your representative measure up against the others? And if location is further capitalized by distinctive display that makes a bright spot in the shopping center, you hold your opportunity in your own hands



It is traffic that makes location, and traffic or location can be mapped in any community. Study, for example, this traffic map of an Eastern city. The width of the bands denotes the comparative density of the passing through along each street. Where should the merchant locate his store here?

tric shop is just a shop, no matter who may operate it. It is in competition with the jeweler, with the book store, with the hardware store, with the department store. It must depend for business on its power to influence men and women to spend those dollar bills across its counter instead of in some other shop, and so location becomes the very first consideration.

I remember the manager of an electric store in an Illinois city told me one time that he had spoken to a Greek, who came a stranger to the town—and rented a prominent corner, opening up a large fruit store. He had asked him how he could afford to take a chance on so expensive a location. The Greek replied: "To start with, a location is everything. The risk is more great to have people not notice that your store is here."

And be it a fruit store, drug store or electric shop, it is the same. Location comes first in importance, service second, and in comparison price is but a minor factor. For ask yourself—where are the most successful stores in every city? In the center of the shopping district. And again, *Why* are these stores so prosperous? Because right there the greatest possible number of people come up to the doors, look into their windows, and respond to any selling influence that they may exert. The good location costs more money, but the good location makes more money for you, and that is the place to be.

If you would open up an electric shop, go where the crowds are thickest. Go where the other most successful shops have gathered. Watch your chance to rent a space where you

can take your place when everybody is already buying. Let your business get a running start.

It is not always easy to decide, however, just which available building will be best for the electric shop, but there is one sure way to find out. Count the traffic. Spend some evenings and some afternoons with a little counter in your hand and get some actual figures. You will find out that one side of the street is better than the other, that one side of the theater or the railway depot gives a marked increase in numbers, that beyond a certain department or general store the buying crowd falls off perceptibly. There are no two blocks of your shop-



But location must be utilized to be effective. As the crowd walks by it looks into the windows. See how this Oklahoma firm, the Peabody Electric Company, has capitalized upon its location with attractive displays. What interesting message does your public get from you?



This is what location means at night—a place along the brightly lighted street where all the shop windows are studied in the evening

ping streets alike in every way. They vary in the "circulation" that they offer you, the audience they gather before your windows to receive your message. Here is the problem every merchant in your town has grappled with. See how they have solved it for themselves. Combine their judgment with your own. Be confident in their experience that good location pays.

But location, of course, is only opportunity, not cash in the bank. It is opportunity bought and paid for ready to be utilized. The profit from the investment comes through developing every bit of publicity value which the frontage on that bit of sidewalk on that street affords. An appropriate electric sign, bright appealing windows, a cheerful and inviting store interior, good service, clever advertising, and all that combination of modern salesmanship that marks the popular shop to-day will be the measure of your prosperity, all

made possible because the location is right.

Many stores have made their bid for business from a side street and won out, but always there has been a disadvantage in the inconvenient address that has been a costly obstacle. Money has been spent year after year to overcome the handicap, to lure the public from the beaten path and make them take the necessary extra trouble. Experience has shown that if the same amount, or four times that

amount had been expended in location it would have been far more profitable. For why work to induce the crowd to come out of its way? Some of them will. Most of them won't. You would be much better off to go to them.

This business of storekeeping is an old, old game that other merchants understand, and though electrical appliances are new as merchandise, the habits of the customer are fixed, and that's what counts. So long as the

electrical man hangs back and keeps his little shop in a small way on a side street, he can expect no more than side street profits. His big success will come only when he sets up his sign among the merchants on the Busy Corner and establishes his retail store in active competition with them. We have got to look this matter of location in the face and take the other merchants' word for it that nothing we can buy will pay so richly in reward.

AVOIDING THE HIGH COST OF SLOW PAY

The Story of How Poor Collections Killed One Contractor's Business—And How Another Man Protects Himself

By EARL E. WHITEHORNE

SOME years ago a certain man with some electrical experience in an Eastern city decided that he would like to get into the electrical contracting business. He incorporated a company, put in a little money, borrowed some more from the bank, hired an experienced manager, and hung out a sign. The manager got a force together and went to work, with excellent prospects, for he was a good estimator and a good superintendent. The little company was busy from the start.

But this manager had one weakness that is unfortunately characteristic of the electrical contractor throughout the country. He was a good manager of men, but a bad manager of money. To keep things humming he took contracts with too small a profit margin and he did not get his money in. He was a poor collector, and before a year had passed he found himself in difficulties. For each week the payroll would come around and the men were to be paid. Each job required material that month by month he had to pay for. But his customers were slow pay, holding him up for two, three, four and five months, and before he realized it the bills he owed began to be held up also, to wait for money lingering uncollected, and so the trouble began. It was the old, old story.

He was short of cash, and felt poor.

He was afraid to figure on big jobs for fear he could not finance them.

His bookkeeping began to pile up and harass him, for too many state-

ments were going out each month, too many coming in.

He found himself rushing through those jobs where he was sure he could make quick deliveries and letting others wait.

And finally, when he ought to have been inspecting, he was out collecting;

Three Fundamental Rules That Make for Good Collections

1. Don't bother with bad customers.
2. Arrange the terms of payment at the same time that you settle on the details of the job—no matter whether it's a legal contract or a verbal order.
3. Insist upon a square deal all the way through—in both the doing of the work and in the paying of the money.

when he ought to have been estimating and developing new business he was sitting in his office worrying about the bills he owed. In fact, one day of each week of his time became a dead loss to the firm, because on Saturdays he spent the morning in a hectic rush from one place to another, telling hard-luck tales and getting in a little money to cover his payroll; and in the afternoon he was all in. His nerve was gone.

And so the weight of all this wasted

time and wasted opportunity—the high cost of slow pay—on top of insufficient capital to start with, gradually broke down the business and the company failed. It was a bitter experience. The manager felt that it was not his fault when the money didn't come in, but he was wrong. For the man who exacts justice from his debtors gets his money—and gets rid of his unprofitable customers. And he does good work and gives good service because his mind is free. And he makes money and gets a reasonable amount of pleasure out of life—which, after all, is just exactly what he's working for.

THE TWO SIDES OF A CONTRACT

But why should grown men fool themselves about this thing? A contract is a contract—be it covered by a letter or a verbal order—and when the contractor agrees to do a job just such a way, and to have it done about so soon, for so much money, why that's just his side of the bargain. But even as he gives good service, once the job is done and the bill sent out he is entitled no less to good service from the customer. His money should be paid when it is due, and this same date of payment should most assuredly be understood between them when the deal is closed. And when the day arrives so also should the money. It is a matter that can best be arranged beforehand, with all courtesy and good feeling on both sides. Let the price be so much cash in thirty days; or, if the customer desires, plus 5 per

cent additional to cover such time as may be reasonable and proper to accept on easy payments. It can be done. It has been done.

For here is the point:

1. There actually is no benefit to the contractor in business where the profit must be wasted in collection costs. Therefore, if there is no profit in it, why be bothered with it?

2. There is no profit in a customer who imposes on you. So why bother with him, for the fellow who owes you money usually goes elsewhere with the next job because he is ashamed to ask for further credit. You are better off without him. You are better off to find him out at once.

It is not the order that you want, you know. It is not the contracts that will make you prosperous. It is the money that comes in after the job is done; that's what you are working for. And the man who works and works, and then neglects to get his money, is like a chap who knocks a home run and then doesn't bother to touch the plate. Why all the hot running if the run won't count?

I discussed this matter recently with W. K. Tuohey of the Tuohey Company—"Everything Electrical"—of Springfield, Mass. Mr. Tuohey is a most successful contractor, a man who has had no illusions as to what it is he is working for, and he sends this message."

GOOD COLLECTORS ARE RESPECTED

"You have often heard it stated," says Mr. Tuohey, "that every one respects a man who pays his bills. I want to say that it is just as true that every one—even his customers—respects a man who *collects* his bills. And the best time to begin is at the time of sale. Too many electrical contractors, in common with business men in other lines, do not realize the seriousness of overextension of credit, but it is absolutely vital to the safety of any business.

"The difficulty with most business men is oversensitiveness, which might be described as a fear of giving offense to a valued customer. This is emphatically a wrong notion, for no customer is valuable who takes offense when a request is made in a respectful manner for payment of a just debt when it is due and payable. And your material on your shelves is a far better asset than any amount represented in charges to accounts receivable—collections doubtful.

"In general we believe that close individual attention and the 'personal touch' is the surest way of keeping accounts off the Suspense Ledger. Of course, on contracts the terms of payment are specified, but this does not mean that you can forget about it after the contract is signed, because forgetting happens to be a failing of certain clients also, and it doesn't do to have both parties overlook this important clause. We have always been extremely careful to ascertain as fully as possible the sort of reputation a purchaser has acquired for paying as per agreement, with others. A thorough investigation of this kind should always be made, as it is the only way to eliminate undesirable accounts.

THREE RULES TO FOLLOW

"In my opinion there is no infallible system or method for the collection of accounts receivable that meets the requirements of every kind of business except the rule of common sense and good judgment and keeping everlastingly at it. No two accounts may be handled in the same manner. One may require 'Balm of Gilead,' as an old friend of mine used to say, and the other one a belaboring with the Big Stick; and in the last analysis each dealer must rely on his own individual judgment in deciding just the way in which successful collections can be accomplished. I suppose we have tried every 'positive sure' scheme ever devised, from follow-up form letters to rubber stamps, and none of these have

we found more than 10 per cent efficient. Our methods differ with different clients, and one course of action which might produce results with certain people would have absolutely no effect on others."

And there you are. The only way out of these collection troubles seems to be to follow these three rules:

1. Don't bother with bad customers.

2. Arrange the terms of payment at the same time that you settle on the details of the job—no matter whether the agreement is a legal contract or a verbal order.

3. Insist upon a square deal all the way through—in both the doing of the work and in the paying of the money.

No contractor can struggle with the high cost of slow pay and still remain happy.

New Jersey Electrical Merchants' Association

The jobbers and dealers of New Jersey have effected an organization to be known as the New Jersey Electrical Merchants' Association, with officers as follows:

President, S. H. M. Agens, Agens & Company, Newark; vice-president, Meyer Rutkin, Newark; secretary, I. Joffe of Silk City Electrical Supply Company, Paterson; treasurer, Abraham Beller, Eastern Electrical Supply Company, Newark.

Let Your Window Win Recruits for the Navy



Those blue uniforms certainly do make the boys look classy—and according to the United States Navy Publicity Bureau, there are still a few thousands of them waiting for good men. Putting in a recruiting window display in your store will help to unite men and jobs, and here is one of the layouts made by the Edison Lamp Works of the General Electric Company, Harrison, N. J. The company offers to supply electrical dealers with the necessary posters and photographs on request.

The Electrical Contractor and the Fourth of July

How the General Ban on Fireworks This Year Will Open New Opportunities for Spectacular Electrical Effects, Illuminations, Decorations, Floodlighting and Other Independence Day Uses for Electricity



Public squares and parks may be beautified for the Fourth with streamers of red, white and blue lamps. Patriotic tableaux may also be shown from a special platform, illuminated from colored flood lamps. For other suggestions see also Frontispiece, page 256

FIREWORKS and the Fourth of July, companion terms of a lifetime, are to be divorced this year. For some time past the protest prompted by fire loss, mangled fingers and lockjaw has been steadily increasing. This year the necessity for conserving the materials from which explosives are made has given an added impetus to the movement for safety and sanity in our Independence Day celebrations, and cities large and small have forbidden the use and retail sale of fireworks within their limits.

All this means one thing—we must turn to our old friend Electricity for such holiday celebrating as the spirit of the times warrants, and it is up to the men in the electrical game to show the public the way. The public will gladly accept safe decorative lighting effects, and the electrical contractor can find profit in doing the job.

Examples of striking decorative lighting suitable for Fourth-of-July effects are shown in the frontispiece, page 258.

Some of the larger cities have already led the way, in this Fourth of July lighting, but even the smallest contractor, the man doing business in Hadleyburg, and Jonesville, can have a share in the movement.

Wouldn't your town look attractive on the night of the Fourth, Mr. Contractor, if one red-white-and-blue Japanese lantern hung from a window of every house? Of course there will be an electric lamp inside of each lantern—and every lamp means 3 to 10 ft. of cord, a plug and a socket. One contractor has proposed making up a lot of such lanterns and hanging a number of them in his window before the Fourth, displaying the price of the outfit complete. Then he will start one of his men out to sell them. Once he gets two or three people on one street started, he believes others will fall in line. The man going into this should make up a supply of the cords to have handy. There will be homes where he can sell strings of such lanterns to hang between porch and gate.

Working with the local committee on decoration, the contractor can install streamers of red, white and blue lamps about public squares, and help to floodlight public buildings and monuments. In his own store it will pay him to have a supply of low-voltage lamps dipped in red, blue, and frosting. Boxes of them in his window labeled "Safe Displays" will do good work. There is a chance here to bring in the "skidoo" or flasher plug. Three lamps can be wired on one cir-

cuit—one red, one frosted and one blue. With a flasher plug in each circuit the outfit will flash red, white and blue. Put all three lamps inside a white Japanese lantern and you have a continuous effect that beats two pinwheels and a skyrocket.

Your town has a Red Cross chapter, three or four patriotic societies, and a board of trade. See that they all get together for a community celebration on the Big Night. In a park or square streamers of colored lights can be put up at low cost, and on a stage lighted from colored floodlamps patriotic tableaux may be shown.

Then there are night parades with every float lighted electrically. Such parades are worth watching and your star wireman will quickly see the possibilities in equipping those floats.

With an eye to the future, moreover, it can be figured out that the greater the blaze of temporary illumination that takes place on July 4, the greater will be the contrasting gloom on the following evening—when the time for selling lighting equipment becomes ideal. There is money to be made and business to be cultivated by using electricity to make your city's Fourth of July celebration more attractive. And, most of all, it's the patriotic thing to do.

GIVING A "CO-OPERATION" DOCTOR FIRST AID

An Appliance Manufacturer Learns From the Brass Tack Brigade That Business-like Dealers Are More Interested in Saleable Merchandise Than in Pseudo-Selling Service

By FRANK B. RAE, Jr.

MICKY DALY, in a painfully new uniform, had come back from camp for a day and, as was quite natural, he came down to the morning conference of the Combination Company's commercial department, where he was received vociferously by the stay-at-home members of the Brass Tack Brigade. The meeting probably would have adjourned with a whoop, but for the fact that on the other side of the room sat

silitis, hair-lip and Saint Vitus' dance. I gathered from these noises—one could hardly call it speech—that the man was a manufacturer of suction sweepers from somewhere in the Middle West, and that he had heard a good deal about the selling prowess of the Brass Tack Brigade and had decided it would be a fine stroke of business to have his appliance adopted as the exclusive sweeper to be sold by the Combination company. One word which

tomers we will send out letters to 'em."

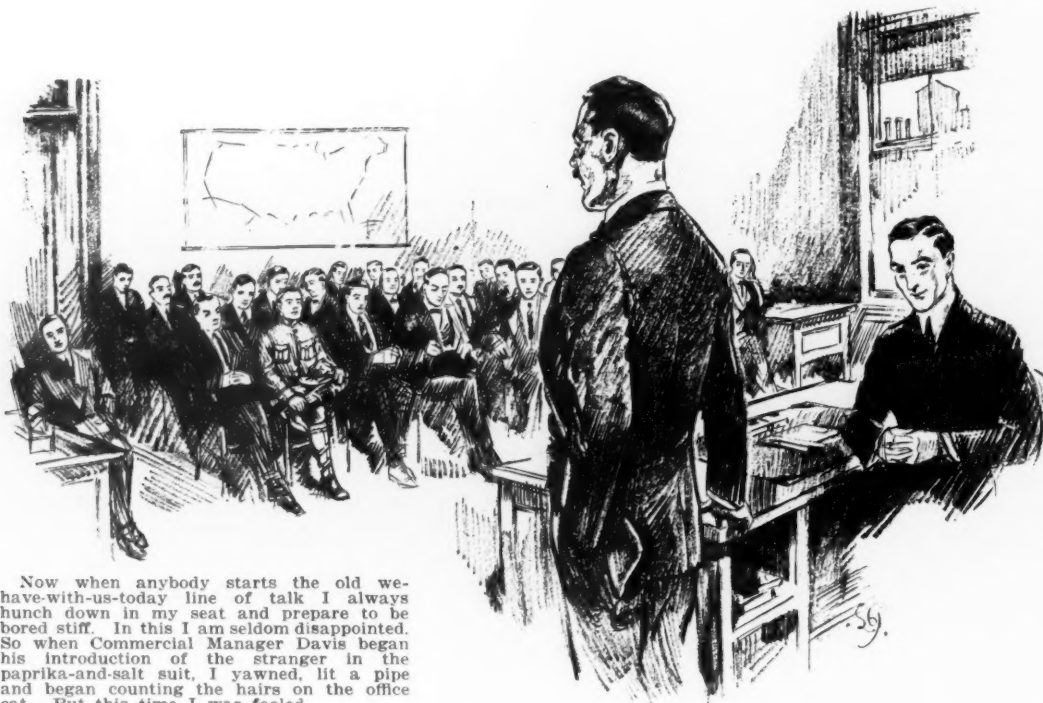
"What kind of a letter? What records have you to prove that the letter you write will be any more effective than one written by our ad man?"

"Well, we'd get up a letter."

"Better than ours?"

"Yes, sir. You see, we would get an expert to write it."

"Kin ye beat that, now?" muttered Micky. "He wud git an expert! 'Tis a comfortin' and complimentary



Now when anybody starts the old we-have-with-us-today line of talk I always hunch down in my seat and prepare to be bored stiff. In this I am seldom disappointed. So when Commercial Manager Davis began his introduction of the stranger in the paprika-and-salt suit, I yawned, lit a pipe and began counting the hairs on the office cat. But this time I was fooled.

a stranger "in our midst," who was scheduled to address the meeting.

Now, when anybody starts the old we-have-with-us-today line of talk, I always hunch down in my seat and prepare to be bored stiff. In this I am seldom disappointed. So when Commercial Manager Davis began his introduction of the stranger in the paprika-and-salt suit, I yawned, lit a pipe and began counting the hairs on the office cat. But this time I was fooled.

The stranger rose, blushed, cleared his throat, fumbled with a piece of paper and proceeded to emit sounds like a man afflicted equally with ton-

kept cropping up in his talk was that threadbare hyphenate — "co-operation." One would think, to hear him, that he had invented the word and had patented all known processes of its application.

* * *

ONE moment, Mr. Dinkbunk," cut in Big Jim Lenox in the middle of a sentence, "just whadaya mean by this here co-operation? Precisely what do you propose?"

"Well, now," answered the stranger, "you know we do a lot of advertising. If you will give us a list of your cus-

thought. Our own letters, I take it, are writ by amychoors."

"What else?" insisted Big Jim.

"Well, we'll send a man here to help out your sales force."

"Howly saints! Have him sind a doctor," prayed Micky, under his breath. "If th' bhoys hear many more cracks th' like av that, th' only help they'll need will be a fleet of pulmotors."

"A man to help out our sales force, eh?" said Big Jim. "That'll be fine. We're only selling 300 sweepers a month and we'll appreciate having somebody around who can teach us

how to do a little real business." The sarcasm was lost upon the stranger.

"What else?" asked Big Jim.

"Well, now, we'll get you up some window displays."

"Better than those of the Society for Electrical Development?"

"Well, I figured to get the society to do some specially for us. We're members, you know."

"So are we—that makes us even. What else?"

"Well, now—"

"Oh, hell!" exclaimed Big Jim, and sat down abruptly.

* * *

THE stranger was surprised and very much embarrassed. I felt sorry for him. He meant all right, no doubt, but he had come before a crowd of hard-headed, experienced, efficient salesmen, with a half-baked idea. The basis of his whole talk was a bland and complete ignorance of the appliance business.

"Mr. Dinkbunk," said Davis, rising, "perhaps I am to blame for letting you in for this hard session, but you must remember that you came to me and asked for the privilege of addressing these men—of persuading them that your machine is the one *they* want to sell.

"It's not fair that we should let you go without telling you why we aren't ready to consider your machine—or rather, under what conditions we *will* consider it.

"In the first place, you offer us advertising. We have one of the best advertising men in the state doing our work. In the second place, you offer us the services of a salesman. Selling is our business, and we have, I am happy to be able to say, some of the best appliance salesmen in captivity. You offer us window displays, and the displays you offer are the same as those we now get.

"Now, please don't be offended. A good many manufacturers are making a mistake similar to yours. They offer us what they call co-operation, and they mean that they want to do our work for us.

"We are merchants. It is our business to know how to advertise, how to sell, how to trim windows. You are a manufacturer. It is your business to make and deliver goods which we can sell cheaper and faster, which we can advertise more effectively, which we can display to better advantage than the goods we now buy.

"It is your business to make appliances so good that our customers will have no trouble with them, and to give us repair and replacement service so prompt and cheap that accidental or unavoidable breakage will cause us neither expense nor ill will."

"May I put in wan word also?" spoke up Micky. "It is this: Mr. Dinkbunk, here, has been led astray



And as the meeting broke up and the boys crowded around Micky to talk war, Dinkbunk said to me, "Gee! but that's a relief. Here I've had so many chair-warmers asking me for advertising and window displays and special salesmen and demonstrators and campaign managers and everything, that I entirely forgot that I was in business to make sweepers. These people are business men—merchants. I guess all the dealers that are worth while are business men too"

by a lot av fellas in th' electrical business who expict th' manufacturer to wash their faces in th' mornin' an' tuck 'em in bed o' nights. There be many such. They paint a sign, 'Electric Shop,' over th' door an' thin wait fer some easy mark of a manufacturer to come an' run their business fer 'em. Th' breed is dyin' out, praise be. We fellas in th' electric business is business men, like th' guy who runs a peanut stand. Nobody iver heard of a peanut vendor waiting fer th' manufacturer o' peanuts to come an' tell him how to arrange peanuts on his push-cart, nor how to put 'em in a bag an' hold out his hand fer th' money. He's a business man an' he does them things fer hisself—an' we in this line kin do 'em fer ourself."

I HAD, as may be guessed, long since forgotten to count the hairs on the office cat. I had taken a keen interest in the flaying which Mr. Dinkbunk was receiving and I felt that the boys were a bit hard on him. Though I had no right to cut into the proceedings, my sympathy for a man who was so clearly in the wrong pew led me to speak.

"You've heard that this bunch is called the Brass Tack Brigade, and I guess by now you know why. But there's one thing you haven't heard, which is that they never criticise without offering a suggestion for improving things. It seems to me that you received a pretty good hint—one that ought to be worth money."

"You bet I have," answered Dinkbunk. "When I went into this business they told me I had to offer lots of co-operation, and I came here to offer it. But I get the idea. What you want is not co-operation but saleable merchandise. Well, by cracky, I'll sell it to you! You give me another chance to talk about my machine and I'll show you something that'll open your eyes."

"Thata boy, Dink! Come to-morrow. Come any time."

And as the meeting broke up and the boys crowded around Micky to talk war, Dinkbunk said to me, "Gee! but that's a relief. Here I've had so many chair-warmers asking me for advertising and window displays and special salesmen and demonstrators and campaign managers and everything, that I entirely forgot that I was in business to make sweepers. These people are business men—merchants. I guess all the dealers that are worth while are business men too. That's the kind I'm going to sell to hereafter—the kind who want good appliances at fair prices instead of a lot of conversational co-operation."

Electrical Credit Association at Boston, June 28-29

A long list of attractions, vocational and avocational, has been prepared for the eighteenth annual meeting of the National Electrical Credit Association at Boston on June 28 and 29. The Boston City Club will be the scene of the business meetings. Credit practice, trade acceptances and cash discounts are among the subjects to be discussed.

CO-OPERATING FOR ELECTRIC-RANGE BUSINESS

How the Manufacturers Joined in Helping Launch a Great Electric Cooking Campaign at St. Louis—The School Where House Wives and Domestic Servants Are Paid to Learn to "Cook It Electrically"

CO-OPERATING in every way to contribute to the successful introduction of the electric cooking idea into St. Louis, three leading manufacturers of electric ranges were on hand with strong corps of demonstrators and salesmen during the household and electric show which ushered in the successful electric range campaign of the Union Electric Light & Power Company under the direction of C. E. Michel.

Throughout the period of the show the Westinghouse company and Chef James Arnold of the Harvey eating-house system cooked complete menus for the delectation of visitors. The Hughes company had five demonstrators who cooked continuously, and the General Electric Company had its own experts who served the food so prepared. As a result of these demonstrations sixty-five ranges were sold to visitors while the show was in progress.

A feature of the electric cooking exhibit was the display of samples of food cooked and baked by local users of electric ranges, and furnished voluntarily. Among these was a loaf of

bread weighing 25 lb., which was baked by a St. Louis woman in a Westinghouse automatic range at her own home. After placing the bread in the oven, she went out for an automobile ride, and upon her return the loaf of bread, perfectly done, was taken from the oven. Fruits canned by oven cooking, roasts, gems, pies, cakes, buns, rolls, chickens, roosters, and every conceivable class of cooking were shown. The names and addresses of the women who had cooked these were prominently displayed, and were convincing evidence for those who might be skeptical as to the results which are being obtained daily by cooking electrically.

THE DOLLARS-AND-CENTS VALUE OF ELECTRIC COOKING

A novel feature to prove that tough meats can be made tender by electric cooking was shown as follows: An old rooster was procured, price 17 cents per pound, as was also a spring chicken, 37 cents per pound. The birds were placed in separate wire coops which bore signs reading as follows:

This is the toughest old rooster in St. Louis. His name is Noah. Probably had something to do with the Ark. He is worth 17 cents per pound. This rooster will be cooked electrically in a Westinghouse range and made as tender as the little spring chicken opposite. Ask us!

The sign on the other coop read:

This chicken is the tenderest chick in St. Louis. Her name is Peep. Price 37 cents per pound. Peep not cheap. She is no better than the rooster. Do you see the economy? Ask us!

After sufficient interest had been created in the chickens, they were cooked before a large afternoon crowd. After being baked and made tender, the rooster was placed back in the coop, as was also the spring chicken, and the signs changed to read, "This was the toughest old rooster, etc." This feature attracted wide attention during the show.

During the show the electric company started an extensive newspaper campaign having for its purpose the education of the local public as to the merits of cooking electrically. The feature of this newspaper campaign was the announcement that the company was establishing a permanent free cooking school under the direction of Mrs. Margaret M. Williams



A CLASS TO TEACH COOKS AND DOMESTICS HOW TO USE THE ELECTRIC RANGE

Realizing that a proper mental attitude on the part of the operator is a big factor in the success of the electric range, the electric lighting company at St. Louis, Mo., established an electric cooking school for domestics and cooks. A well-known authority on domestic science was secured to take charge of the course, which was offered free to all who could be accommodated. At the completion of the course of ten lecture-demonstrations each graduate received a signed diploma and \$7.50 in cash to pay for her time in taking the course.

Winn, formerly in charge of the St. Louis School of Housekeeping. A course of ten weekly lessons of two hours each was scheduled, and the offer was open to housewives, domestics and cooks everywhere in the city of St. Louis. The company further stated that every one who attended the ten lessons would receive \$7.50 in cash, and that those who attained the required degree of efficiency would be given a diploma.

STUDENTS PROVIDED WITH EQUIPMENT AND GIVEN PRACTICAL INSTRUCTION

Those attending the school are provided with white caps and aprons and necessary equipment, and are allowed to prepare many dishes. All cooking

The Credit Man as a Business Producer

By FREDERIC P. VOSE

General Counsel National Electric Credit Association

A CREDIT man is, or should be, a producer of profits. To accomplish this he should school himself and his subordinates in the practice of courtesy.

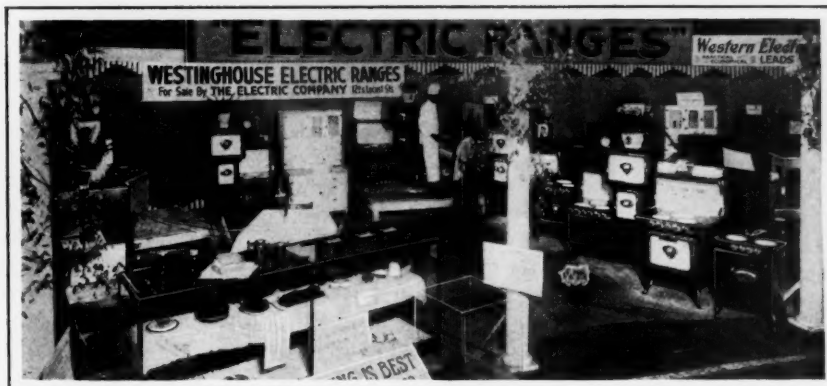
Let's test this little matter: How often do you thank a prompt-paying customer for his businesslike attention to terms? Don't be embarrassed—no answer is required. But on the morrow and henceforth watch the results of telling your customers how

profit of his house. Keep your friendships in repair. Add to them, for removals, changes and death are constantly making inroads upon the number.

A sad sight is the unsociable man. He's poor company for things animal, vegetable or mineral. He's dying by inches—poisoned by breathing, over and over again, the stagnant and exhausted atmosphere of his own repressed personality. He cares for no one, not even himself—fully. No one cares for him. Read Dickens's "Christmas Carol" and learn of the fight which poor old Scrooge made to live after being dead in self for years. The sorriest crime against self and against society is the crime of self-repression. To express self is life. To repress self, death.

Don't lose your temper or become sarcastic, peevish or imperious. Even though your customer may be a rascal or a fool, don't belittle yourself, or your house, by answering him according to his folly.

Freely copy the gracious, genial, forceful, resourceful ways of the successful salesman. Be big. Be a brother booster and a business boomer. Don't grow weary in well doing. Give yourself to the common good.



Three manufacturers of electric ranges worked together for the success of the household and electric show which served as curtain-raiser to the St. Louis range campaign

is done on electric ranges. If a graduate of the school should later happen to be out of a position and desire work, her name will be suggested to persons desiring to employ a competent cook or domestic, although the company does not maintain a regular employment bureau.

Those failing to attend all ten lessons of the course lose the \$7.50 and forfeit their right to a diploma, but are permitted to be spectators for the remainder of the course.

It will be readily seen how this plan will popularize electric cooking, and any one attending the ten lessons will undoubtedly be sold the electric cooking idea. Thus they will be excellent prospects. By means of this plan the Union electric company expects to sell at least 500 ranges by Sept. 1, to people who already know how to operate them and what to expect from them, thereby reducing the private demonstrating expense and consequently the selling cost.

much you appreciate their methods as well as their business. Don't pass this by with a cashier's red ink "Thanks" on the receipted invoice.

Don't sell your goods and indulgences, too. Procrastination is the thief of profits. Gain the reputation for your house of being a prompt yet courteous collector. Be diligent in the firm but tactful insistence upon the observance of terms of sale and in requiring that extensions be granted only upon request and a definite agreement.

This may be done in a sorry manner which will negative all the high-salaried skill and labor of your sales department. It can be done so as to win and to hold the customer and educate him in the adjustment of his own receivables. Individual thought plus personality win. Machine-made duns often lose cash and customer.

It's the business of the credit man to show himself friendly toward the salesman and the customer, for the



Stalking the Dark Store

By R. B. HOWARD

Howard & Roberts, Electrical Contractors
Hampton, Va.

We make a practice of strolling around town after dark and noting those stores and show windows which are poorly lighted. Next day we call on their owners and explain what better lighting would do for them. Besides increasing our own profits we have made a lot of friends in this way.

HOW A WOMAN RUNS AN ELECTRIC STORE

Some Interesting Details of Her System of Displaying Goods and Selling to the Home

HERE IS A STORY that is worth a bit of study by the men who are evolving and developing the business of electrical merchandising. For these electrical home comforts are sold to women to be used by women very largely, and the opinion held by an experienced woman-merchant is much to the point. What would a woman do in selling to this market that is different from the methods of a man?—we wonder. What would her store be like and how would she succeed? Well, all this has been worked out in Pittsburgh in a little shop that is owned and operated by a woman who has grown up in the industry, and she tells here about the methods she employs and what she tries to accomplish. Read the results.—THE EDITORS.

JUST around the corner from Pittsburgh's busy East End shopping district, near the intersection of Penn and Shady Avenues, there is an electrical appliance shop—a "quality shop"—which in the year and a half of its experience has built up a most profitable business for its proprietor, a woman, if you please—Miss Noss of Pittsburgh.

Miss Noss is a woman of considerable electrical experience, having formerly been a member of the sales department of the Pittsburgh lighting company, selling and demonstrating electrical appliances of every kind. Naturally she gained a wide experience here, not only in the uses of the various devices but in their comparative capacities and other features of different makes and models. In addition she learned how to sell

this electrical merchandise to the home, how to display it, how to advertise it, how to sell more to the customers, and she saw it all from the woman's angle.

This knowledge of the electrical game and an inherent capacity for understanding human nature formed firm foundations for her first business venture—the opening of this shop some eighteen months ago.

THE FIRST IMPRESSION

There is nothing at all unusual about the location of the Noss Electric Shop. In fact, from a purely commercial standard the location is rather poor, its one redeeming feature being its proximity to the high-class Squirrel Hill residential section. The little shop is sandwiched in between a high-class delicatessen

store on the one side and an automobile showroom on the other. It is plain and unobtrusive, but has about it an air of refinement that appeals to the best clientele to whom Miss Noss caters. There is a neat green and white striped awning before the shop on whose border appears this legend: "Miss Noss' Electric Shop," which appears also in rather inconspicuous gold leaf on the window.

The window itself is particularly impressive, not for its size, because it is no larger than the average show window, but for the remarkable taste that is always shown in the displays that appear in it. There are never more than a dozen different articles on display at any one time, but the arrangement and the extraordinary taste in the choice of apparatus displayed never fails to catch the eye of



Note that no showcases are used in Miss Noss' Electric Shop. Everything is handy so that you can pick it up and get acquainted

the passers-by. As a matter of fact, the Noss window is always looked for as well as at. The entrance to the store is at the right, which gives the prospective purchasers a better opportunity to inspect the goods displayed in the window, and also a view of the attractive room within. The shop is long and narrow, so narrow that it quite prohibits the use of showcases. There are no other windows than the one in front, but the shop is always well lighted, cheerful and inviting.

EVERYTHING WITHIN REACH

As one enters the store, the effect is particularly good. To the right, along the wall, is a demonstration display of washers, mangles, vacuum cleaners and dishwashers. Just behind these are some glass tables for the display of fancy china dishes and ornaments. In the extreme front of the store on one side is an electric range, and, on the other, a mahogany wallcase displaying irons, toasters, hair dryers, sewing machine motors, flashlights and miscellaneous devices. Nothing is inclosed by glass. All the merchandise is within easy reach of any customer who wishes to pick it up. In the rear the store widens out into a large room, half of which is closed off by a high display case where Mazda lamps, fuse plugs, sockets and other small wiring devices needed in the average home are kept. Behind this case, a small workbench and racks for storing additional stock are arranged where they cannot be seen. Just in front of this case stands a large mahogany table bearing a well-selected line of fancy lamps. So in spite of the poor shape of the room the arrangement is quite ideal, keeping as it does the most called for articles in the front of the store and making the arrangement at once appropriate, convenient and practical.

When Miss Noss decided to open up her electric shop she had well-defined plans and policies for conducting it which she has carried out consistently and to which she attributes her success. She handles only reliable standard advertised goods, and sells these for cash at advertised prices. However, when and where it seems necessary she sells on time at a slightly increased price which takes care of the interest on the money involved, and this policy, she has found, eliminates dissatisfied

customers and complaints and assures a quick turnover.

URNS OVER STOCK NINE TIMES

"You see," said Miss Noss, "many of my customers are of the wealthy class, who are absolutely insulted if I say cash with the order. Then from another section I have many customers of the middle class, who, when buying a washer or something of that



This woman-dealer changes her window displays each week and with these attractive windows has built up a profitable reputation

nature, simply must have a little time to finance the purchase, so I merely perform that service for them and charge them for it. I find that I can turn over my stock approximately nine times a year by selling standard advertised articles.

"I have just three salesmen," she continued. "First, my window; second, the telephone, and third, myself. I trim the window twice a week myself and always keep it well lighted. I depend absolutely on my window and my telephone to bring me my customers, then, once a customer is in my store, the selling is up to me. Of course, as a result of my past connections in the electrical business I have made a large number of friends, and always my first objective with new customers who come into my store is to make friends of them and to deal with them on a woman to woman basis, trying my utmost at all times to gain their confidence. In this way only can I establish and maintain a paying business.

"If the customer seems to be at all interested in something other than that which she came in to purchase, I tell her about it and explain the uses of that particular device, but I take care not to force any sale.

"I carry the fancy china and a few other non-electric lines because they

give variety and appeal to women and they add attractiveness to my store, for women often need something of the sort for bridge prizes and it gets them into the habit of coming here for their needs. Inasmuch as I have none of my material displayed in inclosed cases it takes quite a lot of work to keep everything clean and polished, but you must consider the habits of the average woman. She likes to handle and pick things up much more than a man does. Displaying my goods the way I do makes it possible for one customer to examine any devices she desires while I am waiting on another. This saves me time in making the sale and in the long run makes up for the work of cleaning."

In a few words, that is how Miss Noss has built up a successful business in her "quality shop." She makes the most of everything she has—window, telephone, personality, taste and a determination to please. This business is one and a half years old and the last half year has shown a 100 per cent increase over the corresponding period of the year before—a showing that any business man may well envy.

Miss Noss has found the fundamental merchandising principles and applied them in her electric shop, and these principles so successfully used by a woman may well be copied by any man.



How to Remove Grease Spots with a Suction Sweeper

As a "closing" argument when his prospect balks at price, a suction-sweeper salesman in Ohio keeps this one up his sleeve: He locates a grease spot in the carpet and takes from his demonstrating kit a small box containing cornmeal and salt. He heats this mixture, rubs it into the grease spot with a brush and then takes it out with the sweeper. The grease spot vanishes with the salt and meal; and there also vanishes any objection which the prospect may have had to becoming a customer. For performing this stunt the mixture should be made of six parts cornmeal and one part salt. Three quarts of the mixture is enough to clean an entire 9-ft. by 12-ft. rug.

Electrical Merchandising

The Monthly Magazine of the Electrical Trade

Volume 17—June, 1917—Number 6

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Selling What the Customer Wants

WE in the electrical business are inclined to be a bit dictatorial about the merchandise we sell. We buy what appeals to us instead of studying the wants of the customer. If we believe an appliance to be the best in the market we buy it and insist upon our customers' doing the same. If we see an item which has faults—real or imaginary—we even try to prevent the customer from buying. Especially among central stations has this paternalism been widespread: contracts stating that the use of appliances not approved by the lighting company constitute sufficient cause for discontinuance of service are not uncommon.

This is bad merchandising—bad business. The merchandise manager of a great group of stores in the Middle West says: "I buy the latest thing in every line we handle—whether I like it myself or not. Lots of shoddy stuff comes and goes. We handle it even though we don't like it. If we didn't handle it, somebody else would, and we'd lose business. There's a difference between handling and pushing. We have made it a practice to push only the merchandise in which we have absolute confidence.

One reason why drug stores, hardware stores, department stores—even 5-and-10-cent stores—sell electrical goods is because the electrical merchants have assumed a dictatorial stand, have clung to few lines and worshipped trade-marks, have driven the manufacturers of low-grade appliances to find markets where they could. And the reason these goods are purchased from non-electrical stores by the public is because such stores sell what the public thinks it wants without quibbling or gratuitous paternalism.



Where There's a Wringer There's a Way

DID you ever think of this—that every woman who is using a wringer in her laundry—already stands committed to the purchase of an electric washing machine? Well, she does, and you can prove it to her.

Since Pharaoh's time and way before, clothes had been washed by rubbing them against a rock or on a rub-board. And then they were wrung by twisting in the hands; and centuries of arms had tired and backs had ached before some clever chap conceived the idea of the crank-turned wringer. It brought the first bit of relief from the interminable weekly drudgery of washing

clothes and every woman saw that it was good. To-day we find a wringer in every home.

One of these two old-time methods has to-day been generally abandoned. In all our homes we have adopted the labor-saving mechanical substitute as better than the old-time way of wringing. But the other relic-method still remains in countless homes.

Let the salesman go out next month in the country-wide co-ordinate campaign on washing machines and talk to these women who believe in wringers. Show them the second step to take. For if the wringer is good the washer is better because it saves more labor, more time, more expense. In fact, it buys itself, and in addition, it runs the wringer, too.

And here is the thought that is needed for the campaign—if the woman believes in her wringer she must certainly believe in your electric washer, too. So sell it to her now.



Thinking Before We Kick

MOST of us are so completely concerned with our own troubles that we don't concern ourselves with the troubles of the other fellow.

For example, we complain bitterly because manufacturers cannot make deliveries, forgetting that the manufacturer is in precisely the same boat—that he cannot get materials. And the man who should furnish the materials is equally "up against it"—his sources of supply are choked or wholly estopped.

The thing to do in the circumstances is to do the best one can, to quit complaining of conditions which are only aggravated by complaint, and to turn what energy and talents we may possess toward helping instead of yelping.

"Vitrifying" A Reputation

DOWN in Newport News there lives a ducky who for years has peddled fish and vegetables through the streets. A couple of months ago he suddenly took a brace, made a house-to-house canvass for regular customers, and built up such a business that now he requires the services of an assistant to handle it. Unable to understand this sudden burst of energy, one of his customers questioned him.

"Sam," inquired the patron, "what made you spur up and become a regular business man all of a sudden?"

"I jes' gotta, suh," was the reply. 'Ma ole woman done tole ev'body on the block dat I was goin' to earn a automobile this summer and now I gotta vitrify ma reputation."

We thought of the incident the other day when an electric shop manager remarked that he had assured the "Big Boss" he could beat last year's business by 50 per cent, and that he had to make good. It's a pretty good plan to build up a reputation, and then determine to "vitrify" it.



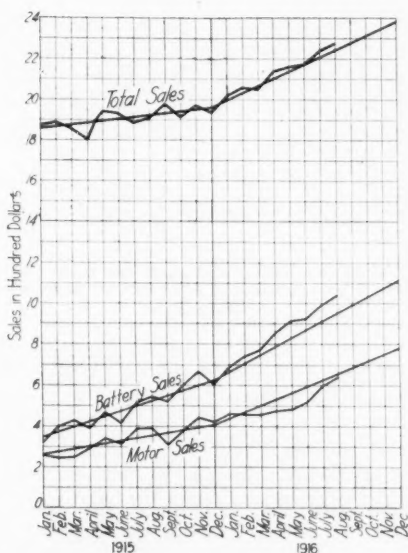
HINTS FOR THE CONTRACTOR

Ideas on Estimating, Stock Keeping,
Shop and Construction Methods,
and Collections



How a Contractor Dealer Uses Graphs to Show the Progress of His Business

"It keeps me in the most intimate touch with my business," is what the manager of a Newark, N. J., dealer-contractor business says about his graphic system of showing the progress of his sales from month to month. This business has been divided into eight departments: wiring, motor sales, motor repairs, motor rentals, storage-battery sales, battery



These graphs show whether each department of the business is paying or whether it is losing money

recharging, battery repairs and miscellaneous sales of wiring supplies, electrical devices, automobile accessories, etc. All sales are tabulated in a large book under the above headings. At the end of each month these various sales are totaled and plotted on a curve sheet 4 ft. high by 3 ft. wide. This practice was started on Jan. 30, 1915. Sales, by hundreds of dollars, are plotted vertically, and months are shown horizontally. A curve is plotted for each of the eight departments, and each curve is plotted in with a different colored ink. The "total sales," which equal the sum of

sales of the eight separate departments, is plotted on this same curve sheet in a heavy black line.

When the curves are completed the manager can tell at a glance just what departments are falling down and which ones are holding the business up. For example, in July of this year his battery business fell way down, but the total sales were greatly increased over June because of a very large factory wiring job. In 1915 he drew an average straight line curve through each of the department curves and the total curve. The slopes of these straight line curves gave him the ratio of increase of his business. In 1916 he set a bogey for each department and drew in curves of increased slopes so that each month when the sales were put in he could tell quickly whether his business was progressing as he had planned, and if not he could tell easily which department needed attention and bolstering up. He says that his men watch these "progress" curves as carefully as he does himself and that they work their heads off to keep each department above its bogey.

How Contractors and Central Stations Co-operate in Ad- vertising House Wiring

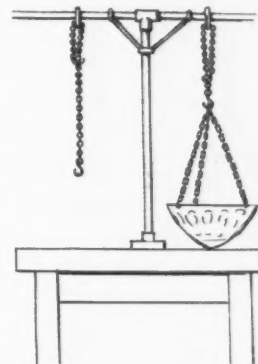
A co-operative scheme has been worked out at Rockford, Ill., whereby the contractors help the Rockford Electric Company to finance the mailing of circulars to owners of unwired houses. This mailing list, according to W. A. Giffen, was secured by taking the supplementary street listings issued with the city directory and eliminating present users of electric service. The list is not entirely satisfactory, since in some instances it includes the tenant instead of the owner. The contractor's proportion of the expense is based on a fixed percentage of the actual gross business which he receives through the company. This scheme has been working satisfactorily for some time, and has

been the means of continually presenting the advantages of electric service to the prospective users in the city. Inasmuch as about 51 per cent of the residences in the city are wired, the field for this class of work is still a large one.

Supporting Fixture Bowls on the Work Bench

The ordinary semi-indirect bowl for lighting fixtures is an awkward article to handle in the shop and J. W. Pope, who manages the Angelo Electric Company at Omaha, Neb., found that breakage on such bowls during the process of wiring was objectionably high.

In order to make the handling of these fixtures safe and easy he rigged up a scheme similar to that illustrated here. By means of hooks of varying length the bowls are suspended while they rest upon the work bench. In the sketch adjustable



A safe and convenient way to support fixture bowls for wiring

chains are shown instead of rods. By the use of this easily arranged device the bowl is held safely and the workman has both hands free to install the wiring.

Selling Rented Motors After Four Months' Use

In conducting its motor and generator sales business in Seattle, Wash., the Hoskins Machine Company prefers to sell machines outright, rather than place them on a rental basis.

There are many times, however, according to Manager Walter Hoskins, when the rental of a motor will convince a prospect of its value and economy more effectively than any sales talk. In such cases the company has

found that the fourth month after the rented machine has been installed is a good time to bring up an invitation to purchase. After that time the chances of closing a sale diminish, Mr. Hoskins thinks, until, at the end of a year, the prospect will only consider purchasing if the motor is overhauled and the bearings are renewed.

Wire Sizes for Electric Ranges

WIRING TABLE FOR ELECTRIC RANGES									
220 VOLTS									
SIZE OF WIRE									
Load K. W.	No. 14	No. 12	No. 10	No. 8	No. 6	No. 4	No. 3	No. 2	No. 1
1.0	191	304	484	770	1220	1940	3100		
1.5	127	203	322	513	815	1290	2060		
2.0	95	152	242	385	610	970	1550		
2.5	76	121	193	308	488	775	1240		
3.0	63	101	161	256	406	647	1030		
3.5		87	138	220	349	555	886		
4.0		76	121	192	305	495	775		
4.5			107	171	271	431	690		
5.0			96	154	244	388	620		
5.5			88	140	222	352	564		
6.0				125	203	323	517		
6.5				118	188	298	477		
7.0				110	174	277	443		
7.5					163	258	414		
8.0					152	242	388		
8.5					143	228	365		
9.0					135	215	344		
9.5					128	204	326		
10.0					122	194	310		
10.5					116	185	295		
11.0					111	176	282		
11.5						168	270		
12.0						161	258		
12.5						155	248		
13.0						149	239		
13.5						143	230		
14.0						138	221		
14.5						133	214		
15.0						128	206		
15.5						124	200		
16.0						120	194		
16.5						118	188		
17.0						116	182		
17.5						114	177		
18.0						112	172		
18.5						110	167		
19.0						108	163		
19.5						106	159		
20.0						104	155		

The electrical contractors of Boston have received from the local lighting company (which offers a low electric-cooking rate) cards on which are printed wiring tables for electric-range installations. By the use of the data given the size of wire for any range installation may be quickly found.

Locating a "Knock" in a Small Motor

A knowledge of automobile-starting motors and generators comes in handy to many an electrical contractor occasionally. Recently a motorist appealed for help to M. S. Pickenpack, who installs and repairs electric motors in Poughkeepsie, N. Y.

"The electric generator on my car knocks," said the owner. "The trouble seems to be caused by the brushes, because when I take them out the generator doesn't make a sound."

Investigation disclosed a worn bearing which allowed the armature to be drawn up against the pole faces when the brushes were in contact with the commutator. On open circuit the armature cleared very nicely.

"It was only a matter of a new bushing," said Mr. Pickenpack, "but it

would have taken a long time to stop the 'knocking' by adjusting the brushes."

U. S. Weather Map as Electrical Dealer's Window Attraction

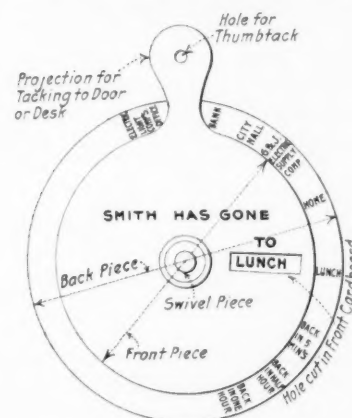
The Gate City Electric Company, Atlanta, Ga., regularly displays in its show window, which is on a busy downtown thoroughfare, a weather map furnished by the United States Department of Agriculture, and finds that this unusual window attraction is the cause of many persons stopping to look over the contents of the window after completing their inspection of the weather map.

The local weather forecast office supplies the maps daily, free of charge, the only stipulation being that the maps be posted in some place where they can be inspected by the passing public. In addition to the weather predictions for local and adjacent territories the maps show wind, weather, temperature and barometer conditions in all parts of the United States. Many persons now make it a practice to pass the Gate City show window to glance at the map, and there are always casual passers-by who stop to look at the map out of curiosity. The weather map has proved an excellent device to win attention to this electrical dealer's window, and one worth many times the slight trouble required to post a new map each day.

When the Contractor Is "Out"

The electrical contractor with desk-room or a small office, who occasionally has to go out to visit jobs under way, leaving his office without an attendant to answer inquiries or visitors, will find the accompanying sign-board handy to advise callers where he may be found and when he expects to return.

The dials may be made of cardboard, fiber board, or any other material at hand, being fastened together so that one may be rotated around the other. On the front or smaller dial the name of the contractor or individual can be lettered as shown, while on the



In the contractor's absence this handy sign will tell where he has gone and when he will return.

rear or larger card, in positions such as to come beneath the slot cut in the front card, are lettered the names of the places which the contractor is likely to visit during the course of the day. On the margin of the larger card it will be found convenient to note in pencil or ink references to the places named in the legends that come beneath the slot.

Making the Advertising Appeal Timely

It pays to make an advertising appeal fit popular interest. Taking advantage of the opportunity afforded by the shipbuilding boom in the Northwest, the Pennington Electro-Mechanical Company of Seattle, Wash., has headed its advertising posters with the words "Marine Electricians" and captured the attention of the public without a struggle. Under the sea-going heading, the signs explain that the firm does wiring, dynamo overhauling, storage-battery charging, etc.



Lining Up with the Red Cross Classes

By J. B. JAYCE, Jr.
Montclair, N. J.

As a means of introducing the electric sewing machine and sewing machine motor to the women of Montclair, the Public Service Electric Company in this district sends two women demonstrators and two machines to each Red Cross Chapter sewing class. Besides demonstrating the machines to those present, the demonstrators help in the good cause by contributing to the local chapter the work done. Since making these demonstrations, sales of electric sewing machines and sewing machine motors have been coming in thick and fast.

Building an Electrical Business around a Trade Mark

In 1912 M. H. Albers of Pittsburg, Kan., had a copyrighted trade-mark, \$400 worth of stock and several thousand dollars' worth of ambition. With them he built the Pittsburg Electric Supply Company, which is now doing a hustling business in electrical supplies, wholesale and retail, electrical



This trade mark, featuring "Service First," is used by the company in all of its advertising, from signboards to movie slides

contracting work, and the manufacture of coils in its own shop.

Mr. Albers is a firm believer in the use of his slogan "Service First," and in his trade-mark, and features both in all of his advertising. The same seal appears on movie slides, county road signs, newspaper ads, postcards and stationery.

How to Sell Second-Hand Motors

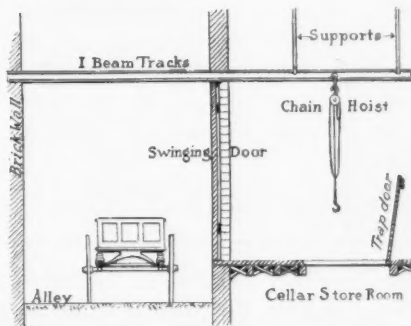
When it is desirable to offer second-hand motors for sale to established dealers in used electrical equipment, certain points should be noted in connection with the machines in order to give the prospective purchaser a proper idea of the motor's worth. The following data taken from the nameplate and from observation of the machine should be given: Horsepower rating, make, type, speed, voltage, whether a.c. or d.c., whether single-phase, two-phase or three-phase, the frequency for which the motor is designed to operate. A statement should also be made regarding the defects in the motor if any, and information should be given as to whether it is complete with base or rails, pulley, starter or speed controller. If there is a compensator with the motor, the type of the compensator (whether oil type or dry type) should be mentioned. If it is an alternating-current motor the type of winding, that is, whether slip ring or squirrel cage type, should be mentioned. If the machine carries a commutator it should be stated

whether the commutator is full or is worn. If the commutator is worn the statement should tell how much it is worn and should also give the height of the commutator above the collar in inches.

If these questions are answered in the letter offering a motor for sale, there will be no difficulty on the part of the prospective purchaser in judging the value of the machine, and needless correspondence to ascertain full facts will be avoided.

Storeroom Door Arrangements for Convenience and Safety

An Indiana contractor has fitted up the back door of his storeroom with a monorail equipment that greatly facilitates handling of material in and out of the basement. A trolley track is suspended at a height of about 12 ft. above the floor. This track runs well back into the first floor of the storeroom and also extends across the

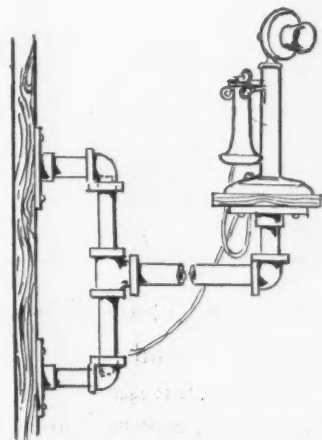


A monorail and traveling chain hoist make the handling of material easy in this contractor's storeroom

alley, being anchored into a brick building opposite the store. By opening a large trapdoor in the floor, as shown in the accompanying illustration, the chain hoist, which can be rolled along the track, can be used for lifting heavy motors, machinery, boxes, etc., from the basement into wagons in the alley. The arrangement also makes the hoist available for handling material into and out of the first-floor storeroom.

Making a Phone Bracket from Pipe Fittings

Here is a handy telephone bracket that any contractor's shop men can put together out of materials at hand. The fittings shown are of regular 1-in. stock. The ends of the vertical nip-



A swinging telephone bracket easily made from 1-in. pipe fittings

ples, shown in the illustration by dotted lines, are filed down to permit them to turn freely in the ells. The base on which the telephone rests is of 1-in. maple, edged with galvanized iron.

Getting the Customer to Pay the First Visit

It is often a difficult matter to induce a probable customer to make the first visit to a store. Various schemes are used for this purpose. One adopted by a Toronto dealer is to allow a discount on the first purchase. When a salesman makes a call on a probable customer, he leaves his card, which is good for 50 cents on a purchase of \$5 or over. This information is conveyed in a line printed across the bottom of the salesman's business card.—*Toronto Electrical Dealer and Contractor.*



When the Buyer Gets Back From the East

By R. B. ALEXANDER
Dallas, Tex.

Contractors and lighting salesmen will find it a good plan to watch the papers for news items announcing the departure of buyers for the Eastern markets. Men from the smaller towns who go to the large Eastern cities are invariably struck with the well-lighted stores in larger places and on their return home they are especially susceptible to argument on the proposition of "better lighting."



LIGHTING SALES and METHODS

Items of Experience and Good
Advice in Lighting Practice

Catching the Country Fixture Trade

By L. C. Spake

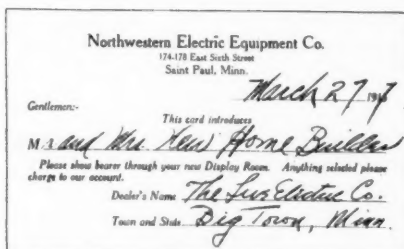
It seems to be a pretty definite habit for American people building new homes in the smaller towns and cities to go to the near-by big city to buy furnishings and furnishings. It matters not whether the local store has a stock of merchandise as good as that in the city. Mr. and Mrs. New Home Builder must needs go to the city, at least to look; then, while there, they buy.

Now, that habit is hard on the small-town furniture man, but it certainly can be turned to the advantage of people in the electrical trade in both the large and the small town if the right sort of co-operation is established. The Northwestern Electric Equipment Company of St. Paul, Minn., has been able to establish that sort of co-operation with its dealer customers. The stunt is worked like this:

Each dealer is provided with a supply of cards like the one reproduced herewith. He keeps in touch with all of the New-Home Builders in his town and learns when that inevitable trip to the city will be made. Just prior to the date of that event he provides Mr. and Mrs. New-Home Builder with an "especial" card of introduction to the gentlemen who operate the fixture business of the Northwestern Electric Equipment Company in St. Paul. He also tells Mr. and Mrs. N. H. Builder about the wonderful variety and the attractive prices of fixtures handled by the Northwestern Company.

To the average electrical man that card may seem a simple thing, but in the hands of Mr. Builder it is a powerful influence. It carries the printed name and address of a single concern in a large city. It helps him find that concern. There is no question about it, for in the busy fixture season as many as thirty or forty cards a month show up at the Northwestern's showroom. Of course, Mr. and Mrs. Builder are well received. A letter from the dealer has perhaps preceded them. The

big city fixture man knows what sort of people they are; what sort of house they are building; what they expect to pay for fixtures; what percentage of profit the dealer wants added to the bill as his compensation, and, in fact, a fund of useful information. It seems quite natural that Mr. and Mrs. Builder should buy from a firm that is so interested in their problems. Indeed, it not only seems natural, but it is a fact that they do buy. The fixture business of the Northwestern Com-



The card of introduction that guides the purchaser to the salesroom and the profit to the dealer's pocket

pany, therefore, flourishes; the small-town dealers of the company make an easy fixture profit without carrying much stock; the Builder family is spared the disappointment that sometimes comes from ordering from a catalog, and everybody, from the fixture manufacturer to the ultimate consumer, is satisfied and happy.

Fixture Firms Get Together in Interest of Better Business Methods

The Southwestern Illuminating Society has been organized at Kansas City, Mo., with a membership of eighteen local fixture firms. Meetings are held twice a month, and the attendance is twenty-five or more, indicating the deep interest taken.

The society was organized to develop the industry in the Kansas City territory, raise its standards and educate the men in the business as well as the public. It is believed by members of the firms taking part

that they themselves have not fully appreciated the opportunities for illumination and what each might do to enhance its dignity and importance. The first definite work taken up has been educational propaganda with reference to costs. The members contribute their own experiences in estimating jobs and keeping accounts. Interesting results have already come from this feature. Some firms soon discovered that they were supplying fixtures at less than cost, others that they were selling items at about cost without any charge for service or handling, not to mention interest or profit on investment.

Some speaker from another line of business addresses each meeting, and tells how his industry tackled the problems of organization and of cost accounting. Eventually, a credit interchange bureau will also be established.

The educational committee is now working out a program for further help of members of the industry, and for a series of steps toward the education of the buying public in illuminating matters. This committee consists of R. O. Fritz, E. W. Cowan, Albert Jacobson and Henry C. Forster. The officers of the society are: President, John J. McGee; vice-president, W. T. Flippen; secretary, A. S. Viner; treasurer, S. P. Russick.

Church Window Floodlighted During Night Wedding

A Louisville contractor has discovered another novel use for lighting projectors.

A wedding was to take place in one of the large Louisville churches and the church interior was being made as attractive as possible for the occasion. Back of the altar in this church is a very large art glass window of most exquisite coloring and very beautiful design. Ordinarily the beauties of this window cannot be appreciated except in the daytime when the sun is shining, for when it is dark the coloring in the design can hardly be distinguished.

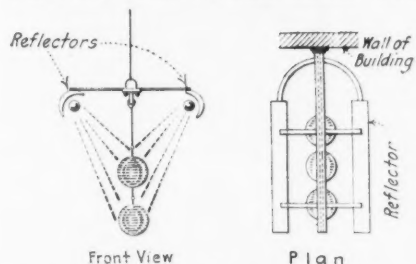
The contractor therefore installed a large projector lamp in the rear of the church and by focusing it on the art glass window obtained a most wonderful effect from the interior.

"If an arrangement of the kind described could be brought to the attention of ministers," remarks Robert

Montgomery, commercial manager of the Louisville Electric Company, "a number of these projectors might be permanently installed for this purpose. Many churches and cathedrals have windows of this kind costing thousands of dollars, which are rarely appreciated for the reason that their beauty is lost without light."

Lighting a Pawnshop Sign

A simple and effective fixture for lighting the symbols of a pawnshop is in use on Seventh Avenue, New York City, near Fortieth Street. Two



Simple arrangement of lamps and reflectors for lighting a pawnbroker's sign

metal trough reflectors are mounted as shown in the illustration and are set to direct a good intensity of illumination on the brass spheres. Four 60-watt Mazda lamps are used under each reflector. Incidentally, enough light is thrown on the building front and pavement to make the location a bright spot in the block.

Electrically Lighted Window Displays Feature of Salina's Spring Show

A week of specially-lighted window displays was held by the merchants of Salina, Kan., this year, in place of their usual spring style show. Prior to the opening on the first evening, all windows were veiled until 7.30 o'clock in the evening when the curtains were pulled aside, the brilliant new lighting was switched on, and the local band struck up lively music.

Pull-Chain Sockets Better than Switches to Control Fixtures in Store

The J. M. Electric Company of Utica, N. Y., formerly used a pull-chain switch to control each fixture on display in its salesrooms. It was found, however, that when changes in the fixture display put these used switches back into stock, there was no market for them because not many pull-chain switches are sold in installations where used equipment could be employed. Now the fixtures are wired with pull-chain sockets, fuse plugs being screwed into the socket bases to complete the circuit. If it becomes necessary to put these sockets and fuse plugs back in stock, there will be no trouble in disposing of them.

It will also be noticed that this fixture display does not employ any false-work to simulate a low ceiling. The walls and ceiling of the room have been painted in light colors and Mr. Johnson, the owner of the store, believes the effect obtained in this manner is better than a false ceiling would give. Each fixture circuit is



Pull-chain sockets are used in place of switches to operate these display fixtures, which are wired through "no-splice" connections to facilitate changes

equipped with "no-splice" connections to reduce the labor of taking down "sold" fixtures and putting up others in their places.

Turning Down One Order for a Bigger One

By G. H. WATERMAN

Lowell, Mass.



About a month ago as I was on my way to the office, I saw a new sign stretched across a shop reading, "Up-to-date clothiers. Will be ready for business on or about the first of the month."

I stepped across the street to see if I could do any business with this new establishment. I was directed to the owner, presented my card and said, "I understand you are going to have an up-to-date shop here, and I would like to install an up-to-date lighting system for you." He asked, "Electric lights?" I said, "Yes, sir." "No," he replied, "they are too expensive, and I have already placed my order for gas lamps."

I persisted with various arguments about his lighting system not being in harmony with his up-to-date stock, and about the gas lights not doing justice to his garments. But there was nothing to

it, he would not even let me bring over some lamps and show him what they would do.

As I went out I asked, "What are you going to do for a sign?" "Now," he answered, "I think we can talk business; I have been thinking of a sign, and if it is not too expensive I will let you put one up. What will a small sign cost me?" "What do you want on the sign?" I inquired.

"I want a sign with the four words on it, 'Up-to-Date Clothiers.'"

"Mr. Storekeeper," I replied, "I can't sell you a sign with those words on it."

"Can't sell it to me?" he said.

"No, sir, I can't sell you an electric sign with the phrase, 'up-to-date' on it, and you lighting the interior of your store with a system dozens of years behind the times." Well, he just looked at me, and I looked kind of sad, but I could see that he was hit pretty hard. At this point I concluded I had better leave my prospect just where he was for a few days, and see what effect my little prod would have on him when it got to working.

And sure enough, not many days later Mr. Storekeeper called me up and said, "Mr. Waterman, I want you to see my new up-to-date lighting system, and I want to talk to you about that sign again." Yes, sir, Mr. Storekeeper had gone to work and hired an electrical contractor to install a very good lighting system for him.

SALES HELPS FOR THE DEALER



What the Manufacturer
Offers to Help You Get
More Trade



Casting the Spell of Electric Appliances Upon the Movie Fan

By C. L. FUNNELL

Ordinarily one does not connect house-wiring with romance, but the two can be successfully mixed and sprinkled with electric appliances, as the Westinghouse Electric & Manufacturing Company has proved in producing a movie entitled "A Romance of the Old-Time Schoolhouse."

Opening with a view of the school of forty years ago, the picture shows the inception of a youthful romance, and a moment later spans the intervening years and presents the interior of the almost-modern home now owned by the couple. In spite of the charming presence of the daughter of the family, breakfast is not all that it should be. The pancakes, for instance, are burned, and the coffee is muddy. After Father has departed unfed, the young lady of the house persuades her mother to visit her electric cooking school.

The inevitable result of a good "home electrical" demonstration ensues. The home is wired without fuss or dirt, an electric range is installed, while lights, percolator, toaster, vacuum cleaner and the rest of the electric home modernizers keep it company. The installation is tactfully and effectively directed by a pleasant young man who shows his powers of discrimination by explaining it all to the daughter.

After being entertained at an all-electric dinner in the remodeled home, the young engineer gets on friendly terms with Father, who owns a factory. In going through the factory the next day, the young expert suggests changes in lighting and the substitution of motor drive for belts and shafting that save Father much coin. And the next time he calls at the house he and the fair daughter—oh, how did you guess?

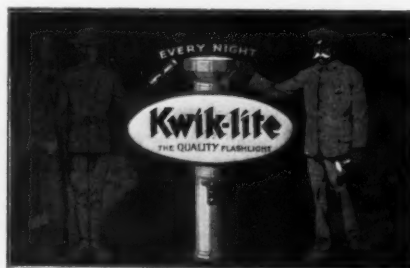
"I'm sorry we can't afford a servant at first," he regrets as she capitulates.

"That's all right, dear," she comforts him, "we'll make electricity our servant!"

The films are being loaned to local electrical interests for use in electrical shows and special demonstrations, and in some cases dealers and central stations work with movie houses in displaying the picture. It has also been shown before home-economics classes and women's clubs with very satisfactory results.

A Timely Poster for the Dealer's Window

The Usona Manufacturing Company of New York, maker of Kwik-lites, has issued to electrical retailers a



This poster for electrical dealers emphasizes the protective value of the flashlamp

timely poster, reproduced herewith, to attract attention and stimulate the sale of its product. The company points out that thousands of flashlights will be sold for the use of soldiers and watchmen in the next few months, and suggests that this poster be used in connection with the window display of its Kwik-lite cases and batteries, to help electrical dealers get their share of this profitable business. The gummed instruction sheet which accompanies the poster can be conveniently used to fasten the poster in the dealer's window.

Putting the National Touch in the Window Display

Many electrical dealers have been giving window space to appeals for recruits and Liberty Bond subscriptions and have used flags, war curi-



This picture of Uncle Sam can be obtained in a variety of forms for use in the shop window

osities and pictures of army and navy life to lend a martial touch, which is particularly appropriate at this time.

Papier-maché eagles can be obtained in widths ranging from 32 in. to 19 ft., and costing from \$1 to \$30. Uncle Sam's likeness is also an attractive trim and is available in cloth paintings or mounted on board at reasonable figures. The type illustrated is made by the Doty & Scrimgeour Sales Company, 74 Duane Street, New York City.

Some electrical dealers have added interest to their windows by displaying double pages of training camp pictures from the Sunday newspapers, and lists of men receiving commis-



Papier-maché eagles add a timely touch to window and store decoration

sions in the Reserve Corps are always attractive. It pays to recognize the trend of public interest, and just at present military subjects go a long way toward making displays timely.

Walt Mason and His Electric Warming Pad

Uncle Walt, the Bard of Empory and apostle of good cheer to 50,000,000 American newspaper readers, is putting all the electric comforts of home into his new house on the outskirts of the famous Kansas village where William Allen White runs his *Gazette*—on which, by the way, Walt used to set type.

The other day Mason's friend, Norman Lewis, sales manager of the Scientific Products Company, Steubenville, Ohio, sent the Kansas laureate an electric warming pad to make his household equipment complete, and by next mail back came this metrical appreciation of the warming pad's usefulness, couched in characteristic Masonese:

My form is growing rather old, and sometimes I feel bleak and cold. Strange shakiness chills my system rack, the gooseflesh gathers on my back, and in my whiskers there is frost; I'm like one in the Arctic lost. When one is old the blood runs slow, and feels a lot like melted snow.

Hot-water bags I used to buy, that chilliness I might defy. I'd pack a bag against my form, and often it would keep me warm, and I'd remark to Jane, my wife, "This dog-gone thing has saved my life." Sometimes I'd wake up in affright, chilled, in the middle of the night; and, fearing that I might expire, poor Jane would rise and make a fire, and boil some water, reeking wet—I can hear her grumbling yet.

Before the water would be warm, the ice would gather on my form, and when the bag relieved the strain, it gurgled like a soul in pain, and made me think of ghosts and sprites which roam around on beastly nights. And it was clammy to the touch, which feeling I detested much. And it would slide around as though it hated to relieve my woe. And once the blamed thing sprung a leak, when I was sick and worn and weak, and squirted o'er me red-hot juice, which made me wrathful as the deuce.

Last Christmas, Jane remarked to me, "This day should fill your soul with glee; here is a gift to make you glad—it is the Safety Warming Pad. There'll be no midnight fires to build, hereafter, when your frame is chilled; it works by the electric juice—no corks or stoppers to get loose; you simply turn the current on, and you'll be warm, so help me John."

Oh, science is a wondrous thing! Had I a harp, its praise I'd sing. Its triumphs one could never name; and science played her greatest game when she produced this Safety Pad, which warms the bosoms of the sad. It's pretty as a rose of June; to invalids it is a boon; it's durable and therefore cheap, when cost of living is so steep.

You can't keep house without it, right; to all the bunch it gives delight; from smallest kid to grave old Dad, they'll all enjoy the Safety Pad.

WALT MASON.

Copyrighted 1917, Scientific Products Co.

The Bryant Electric Company, Bridgeport, Conn., has issued a special dimension sheet for architects which will enable any architect or architectural draftsman to readily place flush switch plates in his plans. Notwithstanding the very complete information given in the catalog of the Bryant company, it has been found that a great many architects

do not find it convenient to make use of some of these data and to facilitate such use special prints have been issued. Copies will be supplied upon application to the Bryant company at Bridgeport, Conn.

Counter Stand for Two-Way Plugs

As the climax to a very comprehensive campaign, including the distribution of many dealer helps, the



An attractive counter display decorated in four colors

Benjamin Electric Company is preparing to distribute to the trade a counter stand for displaying, in the open and in cartons, its Benjamin two-way plugs. Illustrations around the edge of the stand will set forth six uses of the plug. There will be space for stacking ten individually-packed plugs at the base of the stand and a space at the center for displaying one plug unpacked and in the open.

This four-color stand will be sent to Benjamin dealers on request, since

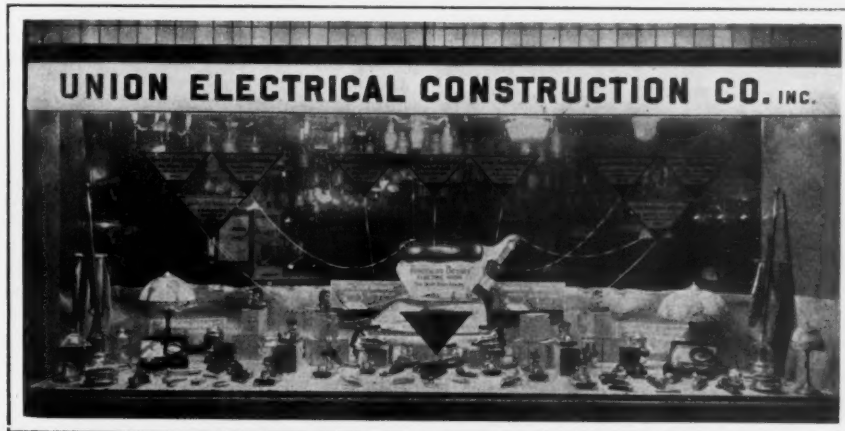
that is the policy which has been adopted for distributing all of the company's dealer helps. The other helps which were sent out in the campaign consisted of street-car cards, five-color window displays, special helps on window trimming, wall hangers and electrotypes for newspaper and electric-light-bill use.

A Booklet for Electric Range Buyers

The Hughes Electric Heating Company of Chicago has issued a booklet entitled "Care and Operation of a Hughes Electric Range." This fourteen-page leaflet is in reality a book of instructions for the careful, conscientious housewife. Not only has it been written by several range specialists, but has been edited, corrected and approved by more than fifty electric range demonstrators and domestic science experts of electric power companies from coast to coast.

Streamers and Giant Iron Catch Attention in This Window Display

A group of triangular signs pasted to the glass and ribbon streamers leading from the signs to a giant electric iron form the basis of a window display now being offered to its dealers by the American Electrical Heater Company of Detroit. There are ten of the signs which are printed in colors and carry condensed selling talks on the various features of the electric iron.



An adaptation of the iron and streamer display is shown in this picture of the window of the Union Electrical Construction Company of Detroit, Mich.

NEW MERCHANDISE TO SELL AND WHERE TO BUY IT

Appliances, Socket Devices and Wiring Supplies Which
Manufacturers and Jobbers Are Putting on the Market

Electrically Lighted Lapel Flag

A flag boutonniere illuminated by a miniature Mazda lamp and energized by a flashlight battery is being marketed by the Triangle Electro Trading Company, 79 Chambers Street, New York City.



This coat lapel flag is floodlighted from a miniature lamp

The battery is carried in the pocket and an inconspicuous cord supplies current to the lamp.

Switches for Busbar Mounting

Push-button switches designed to be mounted directly on the busbars of standard panels by means of two machine screws which pass through the flexible self-adjusting contacts of the switch into holes tapped in the copper busbars of the panel are made by the Bryant Electric Company of Bridgeport, Conn. The same screws also serve as the circuited electrical connection between the switch and the busbars.

The covers of these switches are substantial molded insulation cups, rectangular in shape, with all front edges rounded. Below the buttons of each switch is a metal card holder designed to hold a lettered card designating the circuit controlled. These switches are



This switch is designed to be mounted on panel busbars

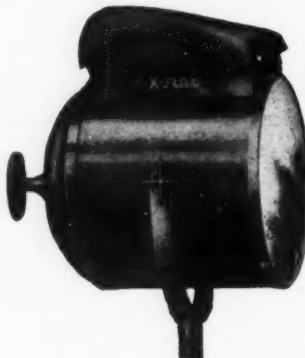
made in both 10-amp. and 20-amp., 250-volt standard push-button types and they can also be procured in the lock type.

A rotary indicating panelboard switch can also be had, rated at 10 amp. and

250 volts. This switch is attached to busbars in the same manner as the push-button type, and if desired can be readily converted into a lock switch by substituting for the standard form of handle generally employed a universal lock attachment.

Light Weight Adjustable Floodlamp

Standard lamps of any rating having a mogul base can be used in the projector shown herewith, manufactured by the X-Ray Reflector Company of Chicago and New York. This unit has a range of 300 to 1500 watts. When mounted on its base this projector is easily adjusted for position in both the horizontal and vertical planes and securely clamped. Attention is called to the hinged top hood. When opened, the focusing mechanism is



This 300-1500-watt floodlamp is easily adjusted in both horizontal and vertical planes

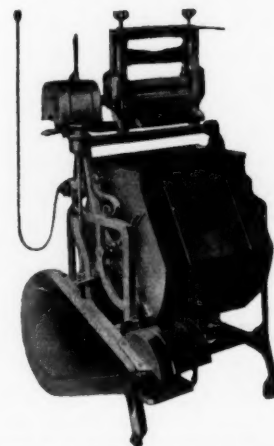
readily accessible, lamps may be replaced and the reflector and front glass easily cleaned. A reflector of special parabolic design is used. The device is made of heavy steel and castings, finished in black and is weatherproof, well ventilated and light in weight.

Three Types of Socket in a One-Piece Shell

A one-piece socket which may be wired quickly has been placed on the market by J. I. Paulding of New Bedford, Mass. The sockets are made with standard interiors and an all-porcelain shell slides over the interior and is locked in place by the key shaft. The key is easily removed, so that the device combines in one a key, a keyless and a lock socket.

An Electric Washer That Will Cleanse One Article or a Dozen

Electric washers have been developed by the Apex Appliance Company, 3223 West Thirtieth Street, Chicago, which operates on the oscillating-tub principle. All-metal tubs with approximate triangular cross-section and the peak or "apex" at the bottom are used. V-shaped strips are attached horizontally to the sides as well as on the bottom to serve as should-



This outfit is belt-driven from a special electric washing machine motor

ders and give a positive throw to the contents when the tub is oscillated. At the bottom of the tub is a settling chamber and drainage pipe. All the heavier dirt drops into this and cannot be carried back into the clothes. By drawing off the dirtiest water after each batch of clothes is washed it is unnecessary to renew all the water for each tubful. The tub rests upon two outside bearings, so there is no chance of lubricating oil mixing with the clothes.

A Pivoted Oven Makes a Double Service Range

An electric kitchenette range which is a variation from the ordinary combi-



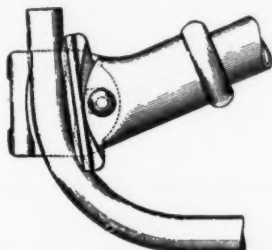
Only one set of heating elements is required with this swinging oven range

nation of hot plates and oven has been developed by the Standard Electric Stove Company of Toledo, Ohio, to meet the requirements of small kitchens. The oven is pivoted at the outside corner so it

will swing over the hot plates and thus not require separate heating elements. There is an open-coil air heater in the top of the oven for broiling, toasting, etc. The oven has double walls, which are insulated and lined with aluminum. With both burners operating at full intensity the oven will attain its maximum temperature in four minutes, it is said. Each hot plate is controlled by a three-heat multiple switch which regulates the power demand to 1000, 500 or 250 watts as desired. To prevent radiation of heat from the bottom of the hot plates they are insulated by bowl-shaped inclosures.

Conduit Easily Bent With Movable Jaw Hickey

With one fixed and one movable jaw, the new pipe hickey of the Fey Specialty Company, Detroit, Mich., is self-adjusting. The movable jaw has a 2.25-in.



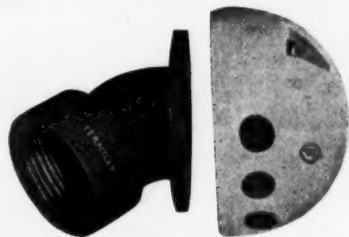
The movable jaw gives this pipe bending tool an automatic grip

bearing which takes the bending strain and the handle is set at an angle to the jaws.

Entrance Fittings Adaptable for Two Uses

Entrance fittings that are reversible and may be used either for vertical or horizontal installations have been developed by the E. H. Freeman Electric Company of Trenton, N. J. Removing the porcelain cap leaves a straight pull for the wires, which can be easily fed through the well-glazed outlet holes of the cap.

These holes are provided with drip sheds for carrying off the moisture.



With cap removed, wires can be pulled straight through this fitting

The porcelain cap is fastened to the flange of the hub by two heavy brass screws, which are locked in the cap to prevent loss as well as to cut down the time of installing. These fittings are

made in 1/2, 3/4 and 1-in. sizes and can be furnished either in black enamel or galvanized finish.

Protecting the Skin When Handling Storage Batteries

A compound of mineral oils and neutralizing agents, known as "Neutraline," is being sold for protecting the skin against storage battery acids. The cream is rubbed on the hands and arms, and it is claimed that four applications a day will completely prevent burning, cracking or disfiguring of the skin. The material was designed particularly for protection against sulphuric acid of about 1400 specific gravity. The Neutraline Manufacturing Company of Omaha, Neb., is the maker.

Tall Glasses Can Be Used With This Drink Mixer

The Wisconsin Electric Company, in conjunction with Horlick's Malted Milk Company, both of Racine, Wis., has placed an improved drink mixer on the market. The entire base and column is



Light weight and easy operation are features of this device

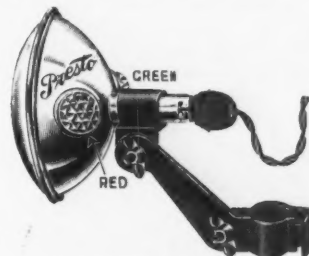
finished in white porcelain enamel. The motor which drives the mixing spindle is stationary at the head of the column, only the mixing spindle moving up and down. The spindle is light and the mixer is very easily operated. The current is automatically turned on when the spindle engages with the driving disk on the motor and is shut off instantly when the spindle is raised. Another advantage of the mixer is that the spindle rises to a height of 7.5 in., enabling the largest container or mixing glass to be set under the spindle without tipping the container.

Acid-Proof Pipe Straps

A complete line of lead-covered pipe straps in sizes from 0.25 in. to 4 in. is being placed on the market by the Central Distributing Company of Detroit, Mich. Acids, unusual atmospheric conditions, lime and dampness are claimed to have no effect upon the coated straps, and the weights are all standardized.

A Bicycle Headlight with Tungsten Lamp

Bicycle headlamps equipped with tungsten units accurately focused have been developed by the Metal Specialties Manufacturing Company of Chicago. A bayonet type of switch is provided at the back of the lamp, where the lamp can be controlled at the will of the rider. The battery container is made of steel of waterproof construction and held in place



This electric headlight is easily attached to any bicycle

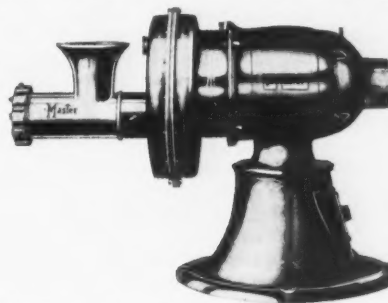
by three leather straps. The lamp-head bracket is made adjustable so that it will fit any handle bar.

Push a Button and Open the Garage Door

The Richards-Wilcox Manufacturing Company of Aurora, Ill., has developed a motor-driven door opening and closing apparatus. The equipment consists of a specially built motor mounted on a base with reduction gears, drums and a control relay, in addition to two limit switches, three sets of push-buttons and the necessary cable and chain. The apparatus can be adapted to practically any style of door.

Simple Coffee Cutter

A completely inclosed, low-speed Westinghouse motor is used to drive the coffee cutter manufactured by the Master Cutter Machine Company of Cincinnati, Ohio. Radial and thrust ball bearings



Gears in this coffee cutter are avoided by using a low speed motor

are used and are the only parts of the machine requiring lubrication. Both single and double-end machines are included in the line, and the "three-in-one" type will granulate or pulverize coffee and may also be used to chop meat.

A Projector for Concentrated or Distributed Floodlighting

Projectors for floodlighting purposes for use with 400-watt Mazda lamps with mogul bases have been developed by the Wheeler Reflector Company of Boston. These projectors may also be used with 200-watt lamps and medium-base adapters. They are mounted on a swivel and trunnion standard for convenient adjustment. When used with the standard 400-watt floodlighting Mazda lamp, with its concentrated filament at the focal point of the reflector, a beam of light is obtained of approximately 170,000 cp. op-



This projector may be used with a 400-watt or 200-watt lamp

posite the center, with all light concentrated within a zone of 10 deg. A wider distribution of light can be obtained by setting the filament slightly in front or back of the focal point.

A Fusible Knife Switch for Conduit Work

The Crouse-Hinds Company of Syracuse, N. Y., has placed on the market a line of condulets that includes a fusible knife switch inclosed in a cast-iron box with a hinged cover. In this cover is a door which furnishes access to the fuse compartment. The design is such, however, as to prevent this door from being opened when the switch blades are closed. The switch is operated by a handle outside the case, and provision is made for locking this handle in either the "on" or "off" position. While these condulet switches are not regularly furnished with a quick-make and quick-break mechanism, they will be so furnished if the purchaser desires. The series condulets possess another desirable feature in that they are provided with separable hub plates—blank, single-hub and two-hub plates. The latter two are made to take standard sizes of conduit from 0.5 in. to 3.5 in. This device is made in numerous capacities, ranging from 30-amp., two or three-pole, 125-volt,

to 200-amp., 500-volt, alternating-current three-pole switches, arranged for N. E. C. fuses.

An Electric Iron with Complete Unit Parts

The Western Electric Company of New York City has developed a 6½-lb. electric iron for household purposes, in which every part is a complete unit, made so as to be interchangeable. Attention is called to several features of this iron. It has a black and white cord in which the conductors are stranded, not braided, producing a long-wearing flexible cord. The pressure plate holds the heating element firmly against the bottom of the iron, keeping the heat distributed where it will be most effective. The heating element is made of chromium-nickel ribbon, and the contact pins, which are easy to replace, of non-corroding German silver. A separable two-piece socket plug is furnished.

A Reflector That Reduces Window Glare

A glare-reducing reflector for exposed windows such as island, open, or mirror-backed, narrow-entrance windows, etc., is the latest addition to the Holophane line of prismatic reflectors produced by the Holophane Glass Company, Inc., New York City. The reflector consists of a special prismatic reflector with an annular prismatic plate over the front half of the opening.

The addition of a refracting plate is an innovation in windowlighting reflectors, and the advantages claimed for it are that it shields the eye from the bright lamp filament and at the same time increases the efficiency by reflecting the light down into the window.

The reflectors, which are 10 in. in diameter and 6½ in. high, are designed for standard 2¼-in. holders.

Easily Installed Conduit Fitting

A fitting for use at the end of exposed conduit for separating the wires as they leave the pipe or cable is being manufactured by Charles G. Robin, Inc.,

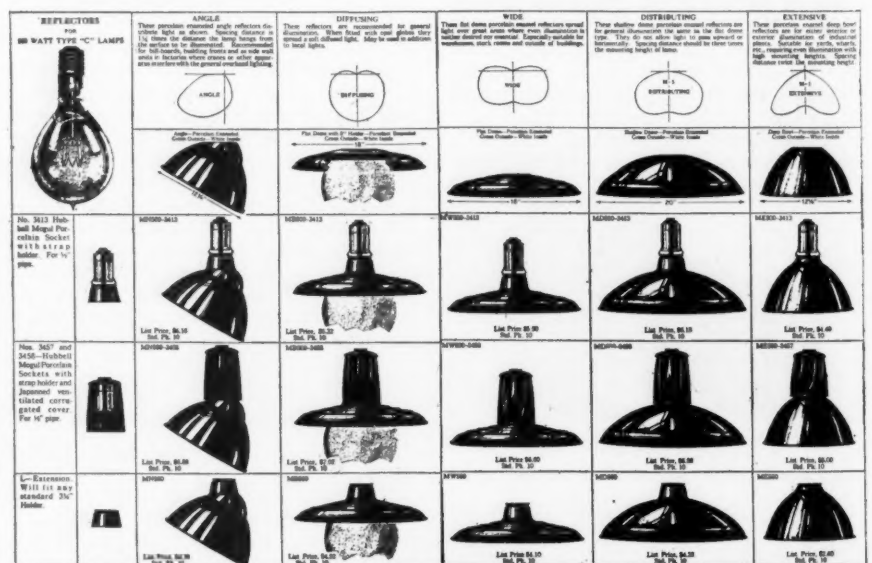


Fitting used where wire leaves iron conduit

48 Warren Street, New York City. For all types of inside work such as meter loops and motor installations it is claimed that this "pipelet" is a saver of considerable labor and time.

A Multiple Unit System of Lamp Reflectors

A complete line of interchangeable reflectors for industrial illumination has been developed by Harvey Hubbell, Inc., of Bridgeport, Conn. Four types are made which are classified as distributing, extensive, intensive and focusing. Each type may be used with the Hubbell porcelain sockets, and ventilated corrugated covers. The manufacturer has issued a schedule of the various reflectors, sockets and holders for use with the 500-watt type C lamp and arranged in such a way that the contractor may conveniently build up from a few stock parts any desired type of equipment.



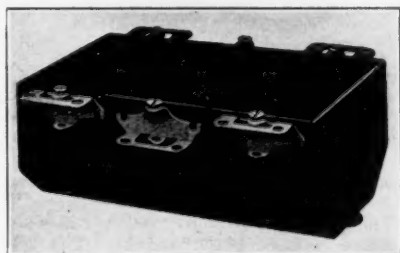
This chart shows the distribution curves, sockets, shades and holders for industrial lighting reflector equipment

Enameled Switch Plate

A porcelain-enameled switch plate that may be finished to blend with wall decorations is being made by the Luminous Unit Company, St. Louis, Mo. The sanitary feature of the plate, it is stated, makes it particularly desirable for use in hospitals, hotels and stores. The plates can be obtained in single, double or three gang designs.

Screwless Switch Boxes

A screwless switch box which the manufacturer, the A. B. Wilson Company of Cleveland, Ohio, claims provides for all the requirements of the contractor's work, is shown in the accompanying illustration. This box can be used for old or new work by reversing the ear from the up to the down position, which provides a correct position of the box. When the ear is up so that the box can be used in old work the lug which holds the switch screw for the other position is bent back with a pair of pliers, thus eliminating the necessity for cutting away any of the fastening-screw space in the wall and leaving a perfect clearance for the box into the opening. The



Switch boxes for old or new work

small rivet or burr which holds the ear in position is offset at the two ends so that only one wood screw in each end will lock the ear securely and hold the box rigid.

The boxes may be ganged up to any length with a perfect register of the switches on the plate. The boxes come together and lock securely and there is no wall between to interfere with the passage of the wires from one switch to the next. When the boxes are ganged and placed in position on the wall the holding screws, even if only used in the end boxes, provide against any box in the gang losing its position, but a further safeguard against this is provided in the manner in which the lug of one box passes through the opening in another and makes possible riveting the boxes together at this point by a few taps with a hammer.

Low-Voltage Gas-Filled Lamps

The Lux Manufacturing Company of Hoboken, N. J., has recently developed 27 to 32-volt gas-filled lamps, which it is manufacturing in 25, 50, 75, 100, 150 and 200-watt sizes. The maker states

that tests show these lamps are very sturdy and have high efficiency. It is said that a number of railroads are considering equipping coaches with this type of lamp.

Resistance Material

Nickel-chromium alloys for electrically heated devices have been developed by the Electrical Alloy Company of Morristown, N. J. One of these alloys has a specific resistance of 600 ohms per mil-foot (1.27 ohm cir. mm.-meter), a temperature coefficient of 0.00019 deg. Fahr. (0.000006 deg. C.), and the melting point is above 2800 deg. Fahr. (1538 deg. C.). The other alloy is for use in electric ovens, electric furnaces and other applications where continuous high temperatures are required. The specific resistance is 565 ohms per mil-foot (1.20 ohm. cir. mm.-meter), the temperature coefficient 0.00009 deg. Fahr. (0.000003 deg. C.), and the melting point 3000 deg. Fahr. (1701 deg. C.).

Electric Kitchenette

An electric cooking unit which is especially designed for use in small apartments and buffets is being marketed by the National Electric Utilities Corporation, 103 Park Avenue, New York City. The outfit consists of two sections—a broiler and an oven. An electric grid permanently placed in the upper section of the broiler is the source of heat, and when used for broiling, a baffle plate mounted above the grid confines the heat and throws it downward. In baking, a light double-walled oven is substituted for the top plate and lid. A three-heat snap switch provides a heat control with the following steps: 500 watts, 1000 watts and 2000 watts.

Electric Garage Pumps

The Hartford Machine Screw Company of Hartford, Conn., has added two new designs to its line of electrically-operated garage pumps known as models W and Y. Model W is a two-cylinder pump which may be furnished either on a truck or stationary and is designed for use in the larger public garages where continuous demands are made for tire inflation and quick service must be delivered. It may be used either as a direct pump for supplying air directly into the tires or in connection with a compressed air tank installation in order to maintain a supply of air on tap. This model is driven by a 0.5 hp. General Electric motor. Attention is called to the fact that in every model of pump no piston rings are used. It is claimed that by eliminating the piston rings and by using extra long pistons, all chance of any oil getting through into the delicate inner tubes of the tire is eliminated. As an added precaution, however, a small expansion chamber is attached to each pump which serves to clarify the air.

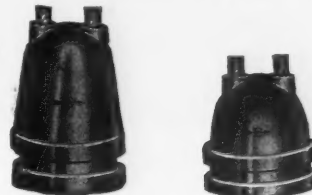
The model Y is a stationary belt-driven pump built for garages which are equipped with a power unit and shafting. This eliminates the necessity of an extra motor. In connection with the development of these pumps, this company has adopted the R. S. A. type of electric motor for all alternating current outfits. This type motor, it is claimed, starts and accelerates the load under the low-voltage conditions more easily than the single-phase motor of the straight induction type.

Immersion Heater with Nickered Brass Tube

The Russell Electric Company of Chicago has placed upon the market an immersion heater, the inclosing tube of which is heavily nickel-plated brass. In this unit a brass tube has been used instead of the usual steel or aluminum, since it has been found that steel rusts, and that aluminum, if the heater is operated in the open, will melt. The tube is 3/16 in. in diameter, 6 in. long, and contains an element rated at 250 watts. It will boil a glass of water in three minutes. The cord is detachable at the unit.

Sockets Grooved for Shade Holder

Two new weatherproof sockets are now being marketed by the Arrow Electric Company of Hartford, Conn. They



Two new sockets for outdoor use

are made up of molded composition material and are grooved for weatherproof shade holders. Each socket is equipped with 6 in. of No. 14 B. & S. stranded rubber covered wire.

To Save Batteries on Rural Telephone Lines

In order to prevent unnecessary battery use on party telephone lines while subscribers are "listening in" for market and weather reports, the Kellogg Switchboard & Supply Company of Chicago has developed a device known as a "battery saver." This attachment is fastened to the hookswitch plate with a single screw, and carries a projection which retains the hook in an intermediate position, permitting a connection through the receiver circuit only. To bring the talking circuit into use the operator presses the latch and the hook is raised to the top of its travel. It is claimed that besides saving batteries the device improves the service, since the usual varieties of party-line noises are excluded.

Switch Plates

Porcelain-enamel switch plates which, it is claimed, are non-corrosive, durable and sanitary and require no labor for polishing are offered to the trade by the Chattanooga (Tenn.) Stamping & Enameling Company. "Armco" iron is used as the base. These switch plates are furnished in various colors and in one to five gang sizes.

Combined Electric Table Lamp and Phonograph

The combination phonograph and electric lamp shown in the accompanying illustration has been developed by the George C. Lynch Company of New York,



Portable lamp with motor-operated phonograph concealed in base

N. Y. The phonograph is concealed in the base of the lamp, which is so designed that it will accommodate any size records up to the 12-in. disk. When the phonograph is to be played the hood is raised, the disk inserted and the power turned on.

The disk is revolved by a small motor in the same circuit as the electric light, but controlled by a separate switch. This arrangement makes it possible to play the instrument when the lamp is not in use. Instead of using a horn as with some "talking" machines, the sound is diffused through the stem of the lamp, which, it is claimed, considerably softens the tone.

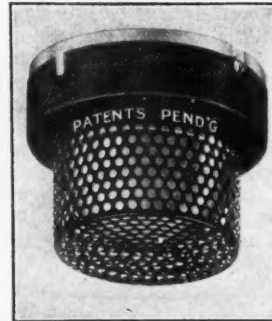
Solderless Wire Clamp

Wire-clamp connectors for circuits, fixtures and grounding purposes which are designed to connect four wires or less of different sizes without the use of heat are being offered to the trade by Alexander B. Simpson of New York City. To connect the wires the screws of the device are loosened slightly and each wire is inserted in one of the four loops and securely connected by tightening the

screws. A knurled surface is provided on the nut threaded on each screw so it will grip the wire and not turn when the screw is drawn up. These connectors are also made for grounding work.

Automatic Fire Detector

A device for announcing fire danger by closing an electric circuit upon a sudden rise of temperature is being made by the Automatic Fire Detector Company of 1834 Broadway, New York City.



Sudden expansion of air by heat causes this fire detector to close a circuit

The instrument consists of a brass shell incased in a metal guard, and a base which is provided with electrical connections and contact points. The shell contains 1.5 cu. in. of air, and with normal atmospheric changes the changes in volume of the air are provided for by means of an adjustable vent.

Heat from a fire causes the air in the brass chamber to expand rapidly, forcing a taut diaphragm to bend out and close an electric contact. The detector is designed to be mounted in any position, and the makers declare that neither vibration nor jar will affect its operation.

Silvered-Glass Bowl-Shaped Reflector

The bowl-shaped reflector shown in the accompanying illustration has been designed by the National X-Ray Reflector Company of Chicago, Ill., for use with 75-watt Mazda "C" lamps. This reflector



Reflector for 75-watt Mazda "C" lamps

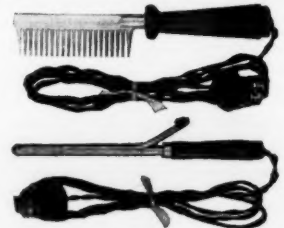
completes the line of one-piece silvered-glass reflectors for industrial and commercial lighting that this company has been making. It is designed in such a way, however, that it can be used with the 60-watt and 75-watt Mazda "B" lamps as well, and for general illumination or for light from drop lamps.

Other reflectors have already been developed by this company for lamps up to and including the 1000 watt. The entire line is of a deep-bowl type that practically conceals the lamp from view, and spreads the light flux considerably. The reflector shown herewith is known as No. 535.

Inexpensive Electric Comb and Electric Hair Curler

The Russell Electric Company of Chicago, Ill., is offering the trade an electrically heated comb, the entire metal part of which is made of a single die casting. The fact that the metal comb proper is so made permits the heating element to be made flat and eliminates the necessity of enlarging the back of the comb. Furthermore, the 30-watt heating element can be placed near the teeth of the comb, which makes for greater efficiency of heat application. The comb has an ebonized handle and 6 ft. of unbreakable tinsel cord.

The curling iron, made by the same company, is a small light-weight device designed to be convenient and handy. It



Electric curling iron and electric comb

is made of steel and weighs only 2.5 oz. Its handle is of black walnut. The 20-watt heating element instead of being mounted on a mica or lava core is wound on an asbestos core. It is said that this construction makes a more durable iron, since the banging of the iron against the dresser or other article will not be so likely to break the element as it would if the resistance wire were wound on a rigid core. Both devices are packed in individual boxes to facilitate handling in jobbing and retail establishments, and are said to be excellent specialties for stores which reach summer-resort trade. They are sold under the trade name of "Hold Heat."

Portable Electric Drill

A line of fan-cooled electric portable drills has been brought out by the James Clark, Jr., Electric Company of Louisville, Ky. These drills are made in seven sizes, ranging from 1/4 in. to 1 1/2 in. Drills for direct current may be had only in sizes up to 1 1/4 in. The drill spindles are made of high-grade, heat-treated steel, which is turned and ground. Heat-treated nickel-steel grease-incased gears are provided. The three largest universal drills embody all the general features of construction of the large direct-current drills, having aluminum frames and ball thrust, while all electrical parts are completely inclosed.

Making Long Distance Telephoning Easy

In order to eliminate local noises while telephoning, the firm of Weilaphone, Inc., Metropolitan Tower, New York City, offers this receiver auxiliary. It consists of a disk-shaped sound chamber, upon

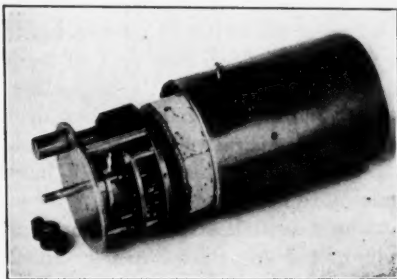


The use of this device leaves the hands free while telephoning

which the receiver is placed, and a flexible tube terminating in two ear-tips. With the tips in use sounds from the receiver are reproduced in both ears, a feature that is particularly advantageous in long-distance calls.

Combination Switch and Rheostat

An improved type of a liquid resistance device which is entirely automatic applies current gradually to a lamp or motor and requires the same attention as a snap or knife switch has been developed by W. B. Crossland of Merchantville, N. J.



View showing parts of combination switch and rheostat

The switch is composed of a wall box and flush plate, a cylinder which incases the container for the liquid and a time device carrying a cut-in for retarding the movement of the container to a predetermined time. The liquid container is divided by a perforated partition through the center. One compartment contains the electrodes which are tapered, and so arranged that the encroachment of the liquid on and around them lowers the resistance allowing the current to build up to normal, at which time the cut-in short-circuits the liquid. On the other hand, as the liquid leaves the compartment, diminishing and draining it from the electrodes, the resistance is increased until the circuit is opened. Then a cut-out performs its function by cutting the container from the circuit.

Record of Lighting Fixture Patents

Design Patents

The following are ALL the design patents pertaining to lighting materials, issued by the U. S. Patent Office between April 27 and May 27, 1917, inclusive:

50,709. Wall Plate for Lighting Fixtures. Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to Mitchell Vance Company, Inc., New York, N. Y. Filed March 3, 1917. Issued May 8, 1917. Term, seven years.

50,716. Street Light Standard. Ihna T. Frary, Cleveland, Ohio, assignor to Charles Andrew, Terrace Park; Frank Andrew, Cincinnati; and William Andrew, Norwood, doing business as the Electric Railway Equipment Company, Cincinnati. Filed Oct. 13, 1916. Issued May 8, 1917. Term, fourteen years.

50,777. Shade. Walter J. Fensterer,

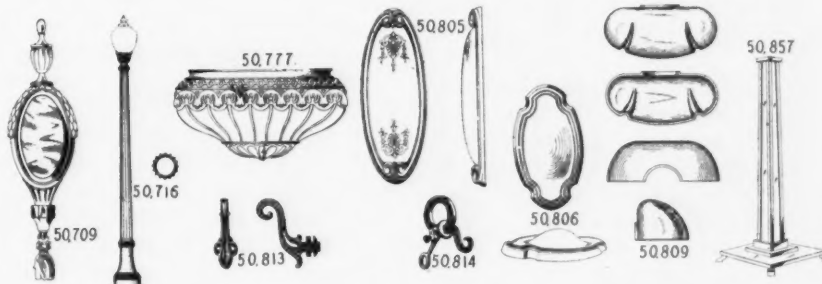
Englewood, N. J. Filed Feb. 28, 1917. Issued May 15, 1917. Term, seven years.

50,805 and 50,806. Wall Plate for Lighting Fixtures. Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to the Mitchell Vance Company, Inc., New York, N. Y. Filed Nov. 27, 1916. Issued May 22, 1917. Term, seven years.

50,809. Lamp Shade. Frank Yokel, Pittsburgh, Pa., assignor to Pittsburgh Lamp, Brass & Glass Company, Pittsburgh, Pa. Filed Feb. 19, 1917. Issued May 22, 1917. Term, seven years.

50,813 and 50,814. Clamp for Light Reflecting Bowls. Charles Ernest Jones, Chicago, Ill. Filed Feb. 26, 1917. Issued May 22, 1917. Term, three and one-half years.

50,857. Lamp Base and Standard. William G. West and Roderick S. Foster, Aurora, Ill. Filed Feb. 21, 1917. Issued May 29, 1917. Term, six years.



Structural Patents

1,225,032. Reflector. Paul M. Hotchkiss, Chicago, Ill. Filed Jan. 2, 1915. Issued May 8, 1917.

1,225,051. Portable Electric Lamp. Henry M. Peters, Chicago, Ill. Filed July 6, 1916. Issued May 8, 1917.

1,225,397. Shade Supporting Device. Reuben B. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed Nov. 22, 1913. Issued May 8, 1917.

1,225,411. Electric Lighting Fixture. Albert Cohn and Louis H. Debs, Chicago, Ill. Filed Dec. 1, 1916. Issued May 8, 1917.

1,225,491. Portable Electric Lamp. Adolph C. Recker, Oakville, Conn., assignor to Waterbury (Conn.) Manufacturing Company, Waterbury, Conn. Filed Nov. 8, 1916. Issued May 8, 1917.

1,226,211. Lighting Fixture. Max Herskovitz, Chicago, Ill., assignor to Peerless Light Company, Chicago, Ill. Filed July 26, 1916. Issued May 15, 1917.

1,226,338. Lamp Socket Lock. Herbert R. Land, Little Rock, Ark. Filed Jan. 11, 1917. Issued May 15, 1917.

1,226,717. Lighting Fixture. Merton P. Stevens, East Orange, N. J. Filed April 22, 1915. Issued May 22, 1917.

1,227,144. Illuminating Device for Electric Fixtures. Ralph E. Houghton and Michael J. Hanlon, Cliftondale, Mass. Filed Aug. 22, 1916. Issued May 22, 1917.

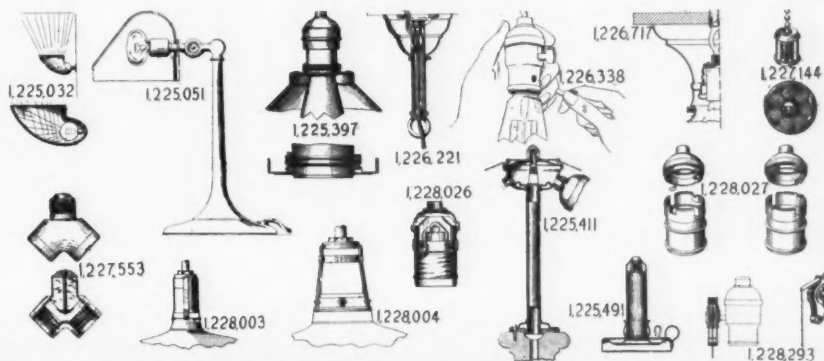
1,227,553. Plural Lamp Socket. Adolph C. Recker, Oakville, Conn., assignor to Waterbury (Conn.) Manufacturing Company, Waterbury, Conn. Filed March 2, 1917. Issued May 22, 1917.

1,228,003 and 1,228,004. Reflector Holder. Henry D'Olier, Jr., Bridgeport, Conn. Filed March 28, 1916. Issued May 29, 1917.

1,228,026. Lamp Socket and the Like. Charles J. Klein, Milwaukee, Wis., assignor to the Cutler-Hammer Manufacturing Company, Milwaukee, Wis. Filed March 24, 1913. Issued May 29, 1917.

1,228,027. Casing for Lamp Sockets or the Like. Charles J. Klein, Milwaukee, Wis., assignor to the Cutler-Hammer Manufacturing Company, Milwaukee, Wis. Filed Dec. 8, 1913. Issued May 29, 1917.

1,228,293. Attachment for Electric Light Snap Switches. Fernand Cailleau, Atlanta, Ga. Filed Oct. 6, 1915. Issued May 29, 1917.



Copies of illustrations and specifications of any of these patents may be obtained from the Commissioner of Patents, Washington, D. C., for five cents each

"HOW IT WORKS" Explained for the Customer



The ABC of Electrical Appliances—Ideas and Stories for Your Local Newspaper



Volts for Irons

"Mis Jones, do yez t'ink it would hoit the insides of this here 'lectric iron if I was to put it on the stove where it'll get hot?"

The Empress of the Kitchen held the offending appliance up for Mrs. Jones to inspect.

"Foist 'lectric iron iver I seen that wouldn't behave like it had a fire in't," she added in supreme disgust.

"There must be something the matter with it, Katie. I don't think you ought to put an electric iron on the stove."

"Aw, you can't hurt 'n 'lectric iron, Ma!"

The sixteen-year-old heir to the Jones estates stood at the kitchen door and gazed at the iron with interest.

"What do you suppose is the matter with it, William? It doesn't get hot enough to do any good."

William snapped off the switch and began to examine the iron with the studied manner of a St. Bernard who has just come upon a treasured bone of the Pomeranian next door.

"Where'd you get it?" he inquired.

"Down at Boom's department store. They had a special sale of them at \$3.98."

"What did you let 'em slip a high-voltage iron over on you for?"

"Why, the girl said this was all right for any lighting circuit."

"Well, lookit here! It's marked 115-125 volts and we have 105 volts here. Voltage is the punch that shoves current through the iron and current gives you heat. If your voltage is 10 per cent lower than the iron is marked for, you'll be shy about 20 per cent in heat. In the same way a change of 5 per cent in voltage means a change of 10 per cent in heat. This iron is marked '115 to 125 volts' and we only have 108 volts at the most. What we need is a 108-114-volt iron."

"All right, young man. Suppose you trot downtown and change it for

me. After this I'm going to buy electrical goods from an electric shop where they know something more about them than the price."

"I should hope so," agreed William coldly.

Putting the Baby to Sleep Electrically

According to the copy books of our youth, invention has ever been the daughter of necessity. In Chicago, at least, the aphorism is still true. When Nels Joleen, an inventive dweller of the breezy city, discovered that it was taking too much of his wife's time to keep the baby quiet, he put an electric motor on the emery-wheel end of a hand grinder, and attached a wooden rod to the grinder handle. The other end of the rod was connected to the baby carriage, and now when that vehicle is mounted on a neat wooden track, the motor supplies a gentle backward and forward perambulation that fills the infant's soul with morphean joys.



Helping the School to Buy an Electric Flag

By F. C. IRBY
Hattiesburg, Miss.

We sold an electric flag to our high school by furnishing the school with 10,000 tablets and pencils at wholesale cost. These the students disposed of at retail prices and the profits paid for the flag. If desired, the pencils may be furnished in red, white and blue, and the tablets may bear American flag emblems and the oath of allegiance. By this system, every pupil in the school who either sells or buys pads or pencils, feels that he or she has a personal interest in the electric flag purchased.

Finding the Switch at Night

"You people talk by the hour about the convenience of electric light, but I can't see where it has much on the old-fashioned candle in some respects."

Mr. Davis was leaning against the counter in the local electric shop, biting his cigar savagely. It was fortunate, thought the man behind the counter, that the disturbed house-owner had dropped into an electric shop to air such views, instead of planting destructive impressions at his club.

"In my own home," countered the clerk carefully, "I find that touching a button is much easier than hunting for matches."

"That's all right, but when you have to go on a still hunt for that switch it doesn't help much. Last night somebody left the cat in. From 2 to 3 a.m. he Carusoed around the first floor and then I went down to open up new and larger opportunities for him in the outer world. About the only thing I didn't knock over in hunting the light switch was the piano, and it was no fault of mine that that remained upright. It was built that way. Stalking the wily auk in the Australian jungle had nothing on me."

"There's an easy way to fix that," said the clerk pleasantly. "Watch this!" and he switched off the lights in the store. "See that spot of light near the door? That's a radium switch finder. There's another over your head on that pull-chain. That's it. Push the button and we'll have some more light."

"Now this little attachment contains enough radium to be a permanent source of light. Just fasten it to your wall plate or pull-chain and it becomes a life-time lighthouse."

"Don't those things die out after a while?"

"Not these, Mr. Davis. There is an older type of phosphorescent pendant that absorbs light and then shines for a number of hours. That kind is mighty convenient where a strong light falls upon it when the lamp is lighted."

"But these new ones stay luminous all the time, light or no light. How many switches have you in your home?"

"Just trying to figure," said Mr. Davis thoughtfully. "Suppose you wrap me up six of those 'lighthouses' for a start."



GOSSIP OF THE TRADE

Selling Illumination—"Buying a Cause and Paying for Effect"

The successful salesman is one who sells not the *cause* of producing good lighting but the *effect* of good lighting. This is the basic idea behind a new merchandising book just issued by the Society for Electrical Development, in which it is argued that too many contractors and salesmen fail to get the customer's point of view and try to sell their illuminating equipment "on the hoof." They forget that the customer is primarily interested, not in lighting equipment and current, but in such matters as increased profits, cheerfulness, or accident prevention resulting from good illumination.

The new booklet is presented in a style somewhat similar to "How to Sell an Idea," the society's successful handbook on electric range selling. Following the development of the main idea—"Selling Illumination"—there is a chapter on "How to Sell," as well as one on "Factory Illumination." The

book concludes with a bibliography listing books and articles on the subject of good lighting.

Running a "Work-Together" Contest in Chicago

The co-operative publicity department of the W. D. McJunkin Advertising Agency of Chicago is offering \$100 in prizes to encourage electrical companies to contribute ideas and suggestions to the agency's bulletin of publicity. Two contests are planned, one for window trim ideas and photographs, and one for sales ideas. The judges in the first event will be E. A. Edkins of the Commonwealth Edison Company, Allen H. Kagery of Mandel Brothers and C. M. Herr of The Fair, a department store. Decisions on the sales ideas will be handed down by Dana H. Howard, advertising manager of the Commonwealth Edison Company; John G. Learned, assistant to vice-president of the Public Service Company of Northern Illinois, and L. C. Spake, Western editor of *ELECTRICAL MERCHANDISING*.

Jovian Order Announces Accident Insurance Plan

Since last October, when Jovian dues were increased from \$2 to \$4 per year, the Jovian Order has felt the need for a tangible, direct and easily-understood membership benefit that, aside from the many other benefits of Jovianism, would match the amount of money the individual member invests each year in Jovianism.

To meet this need a new insurance feature has been created for the benefit of Jovians. In announcing the plan Mercury Ell C. Bennett, says:

"The plan as completed provides an opportunity for Jovians in good standing to get a direct return in dollars and cents which is several times the amount of the present annual dues. To get this benefit a Jovian merely buys his accident insurance, or accident and health insurance, through the Jovian central office, thus saving the insurance salesman's commission. The policies thus secured are identical with policies issued by three of the largest existing accident companies. The minimum actual saving in money through the purchase of a policy is \$13. The maximum actual saving through the purchase of more than one policy is \$41.

"The Jovian central office fills the

A Convention of Electric Self-Starters—The "Automotive" Association at Hot Springs



Makers of electric-lighting, starting and ignition apparatus for gasoline automobiles have formed what is called the Automotive Electric Association, and held their first convention at the Homestead Hotel, Hot Springs, Va., May 17, 18 and 19. The attendance approximated forty from the following companies: Dayton Engineering Laboratories Company, Dayton, Ohio; Dyneto Electric Corporation, Syracuse, N. Y.; Electric Auto Lite Company, Toledo, Ohio; Leece-Neville Company, Cleveland, Ohio; North East Electric Company, Rochester, N. Y.; Remy Electric Company, Anderson, Ind.; Robbins & Myers Company, Springfield, Ohio; Splittdorf Electric Company, Newark, N. J.; U. S. Light & Heat Company, Niagara Falls, N. Y.; Wagner Electric & Manufacturing Company, St. Louis, Mo.; Westinghouse Electric & Manufacturing Company, Pittsburgh, Pa. While the objects of the new association are to advance and improve the industry by standardizing automobile electrical equipment in co-operation with the automobile manufacturers, some of the most important sessions of the Hot Springs meeting were held on the golf course. Prizes in links performance were won by H. W. Griffith, Walter Robbins, J. C. McMahan and W. Brazelton. Prizes in shooting were won by J. G. Wood and A. F. Kwis.

place of general and sub-agents, and takes care of office and collection details without charge. The company writing this insurance," Mr. Bennett explains, "is the Employers' Indemnity Corporation, which is already successfully serving the National Electrical Contractors' Association members and hundreds of utility companies.

"There are no exemptions in Jovian policies, and no additional assessments or charges are possible. As an example it may be stated that the Jovian accident policy covering such risks as traveling men, clerks, executives and others not engaged in hazardous occupations, may be had for \$12 a year. This policy, although ordinarily a \$25 policy, provides for a payment of \$5,000 for loss of life, with a \$25 weekly indemnity for total disability, and a \$10 weekly indemnity for partial disability."

New York Jovians Hear War Talk

The June meeting of the Jovian League of New York was addressed by Herbert Bayard Swope of the *New York World*, and a brother of Gerard Swope of the Western Electric Company. Mr. Swope spent several months in Germany just before America became an active factor in the war, and his talk on the situation



We would like to have you meet Louis Kossuth Comstock. Mr. Comstock's name and fame are stamped on the electrical equipment of big important buildings all over this country, and he himself is occasionally mistaken by some ardent Bull-Mooser for the strenuous sage of Oyster Bay. In addition to looking like Teddy, Mr. Comstock heads L. K. Comstock & Company, electrical contracting engineers, who have offices in New York, Chicago and Cleveland, and have done electrical work from Cuba to Nova Scotia.

in the Kaiser-ruled empire was a most interesting one.

In addition to subscribing for Liberty Bonds as a unit, the League has appointed "Jimmy" Betts chairman of a committee to promote individual Jovian subscriptions.

On June 19 the League will enjoy a beefsteak dinner, rejuvenation and general entertainment at the Harlem Yacht Club, City Island, N. Y.

Electrical Council of Underwriters' Laboratories

At a meeting of the newly organized electrical council of the Underwriters' Laboratories, held at Chicago



If you had just been separated from an involuntary bath in Lake Timagami, Canada, by a friend, a guide and an oar; if you had just been made general sales manager of the General Electric Company; and if you had just been ordered to smile so your picture could brighten a page of ELECTRICAL MERCHANDISING—wouldn't you turn loose a 1000-cp. Type C grin? So did J. G. Barry

on May 23, the council voted an extension to the existing standards on metal molding to include surface metal raceways of one-piece design for use on two-wire circuits not exceeding 1320 watts capacity. Under this extension the new surface wiring raceway known by the trade name of "Wiremold" was listed as standard.

On the subject of fuses, action was taken directing that the staff engineers report to the Electrical Council suggestions for a possible set of specifications, method of testing, supervision and field follow-up of the details of design, construction and performance under test, of refillable fuses.

The newly developed standard on armored cables was formally adopted.



Hot Springs was the name of their destination, not the cause of the stop. Among those present are: H. W. Nebelthau, president of the Peerless Electric Company, Minneapolis, Minn.; G. E. Varney, president of the Varney Electric Company, of Indianapolis and Evansville, Ind.; Mr. and Mrs. N. G. Harvey and G. H. Miller, general manager of the Tel Electric Company, of Houston, Tex. Mr. Harvey is general manager of the Illinois Electric Company of Chicago and is the retiring president of the Westinghouse Agent Jobbers' Association

Other subjects of discussion included the construction and use of miniature motion-picture machines and their special films, electrical heaters and pressing irons, ground clamps, bell-ringing transformers and disconnecting plugs or receptacles of large capacity for battery-charging circuits and similar uses.

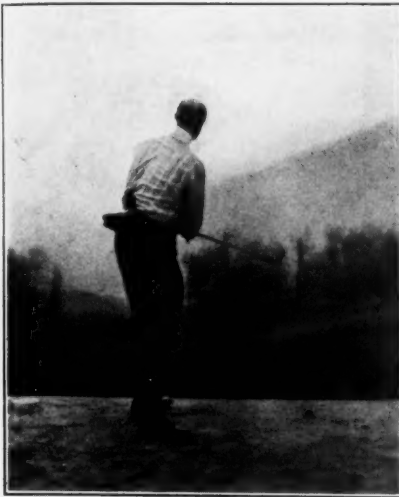
Dana Pierce, vice-president of the Underwriters' Laboratories, New York City, is chairman of the council.

Committee of Big Electrical Contractors to Work with Government

At the meeting of the Conference Club, an organization of the larger electrical - contracting organizations doing an interstate business, held at French Lick, Ind., May 21 to 23, a committee was appointed to consider the relation of the electrical contractors to the war situation, and to discuss with the federal government means for handling war work in connection with the great mobilization camps to be erected in the next two months.

There will be thirty of these great cantonments, scattered at principal centers throughout the country, and altogether capable of housing the initial army of 1,000,000. Obviously, a tremendous task is now before the government in erecting these great temporary cities, complete with water supply, sanitation and electric lighting arrangements ready for the mobilization in September.

L. K. Comstock of New York heads the committee which has been advising with the government at Washing-



"A. Tall Berry"—See how he measures up with the mountains! Mr. Berry, who purveys flashlights and wiring supplies by the carload, was here snapped unbeknownst. He is shown driving off from the Matterhorn tee of the Hot Springs "goat course," where the greens are so oblique that even the golf balls have to be equipped with square corners, to keep them from rolling clear down into West Virginia.

ton, the other members being J. G. Livingston, W. C. Peet, F. E. Newbery, F. W. Lord, Ernest Freeman, G. M. Sanborn and T. B. Curtis.

At the French Lick meeting W. L. Goodwin, General Electric Company, and J. Nelson Shreve, Electric Cable Company, addressed the Conference Club.

Summer Meetings of Electrical Contractors

Syracuse, N. Y.—New York State Electrical Contractors' Association, June 12-13.

Philadelphia, Pa.—Electrical Contractors' Association of Pennsylvania, June 19-21.

Peoria, Ill.—Illinois Electrical Contractors' Association, June 22-23.

Santa Cruz, Cal.—California Association of Electrical Contractors and Dealers, July 11-14.

Worcester, Mass.—Electrical Contractors' Association of Massachusetts, September.

* * *

H. M. Kohn, formerly commercial manager of the Birmingham (Ala.) Railway, Light & Power Company, has resigned that position in order to enter business for himself in Birmingham. He will be succeeded by **H. L. Draper**, who has been assistant commercial manager of the Birmingham company for some time.

The H. T. Electric Company of Indianapolis, Ind., has moved from 324 North Delaware Street to 617 North Capitol Avenue. The firm specializes on repairs and parts for all types of electrical apparatus on automobiles, motorcycles and tractors, and its rapidly growing business in this line made the move to more comprehensive quarters a matter of necessity.

John R. Chadwick has been appointed superintendent of the Lux Manufacturing Company, Hoboken, N. J. Mr. Chadwick was formerly identified with Westinghouse Lamp Company as assistant superintendent of its New York Works, having been associated with that organization for more than twenty years.



Basking in the Virginia sunshine at the Hot Springs jobbers' convention. E. G. Bernard, Jr., "the youngest jobber in the business," imbibing bits of background from Gilbert S. Smith of Philadelphia, who entered the electrical arena in 1883. Mr. Bernard's father, who died recently, was also a pioneer jobber, having started in the electrical business at Troy, N. Y., in 1879.

The Gleason-Tiebout Glass Company of Brooklyn, N. Y., has issued a new booklet entitled: "Street Lighting Glassware." Several varieties of globes are illustrated in white outline on a blue background, giving the impression of a high-class blueprint.

C. D. Powell has been appointed factory superintendent of the Scientific Products Company at Steubenville, Ohio, manufacturer of the Safety warming pad. This company has recently doubled its factory force in order to meet the demand for electric heating pads despite the present season of warm weather.

The George H. Wahn Company, Boston, Mass., which less than two years ago started in business in small quarters at 54 High Street and shortly thereafter moved to its present location at 99 Bedford Street, Boston, is now moving from the latter address to new quarters at 69 High Street, where it will have the very best of modern facilities for handling its business which has undergone rapid development through what the company calls "Wahneo Service."

The A. B. Wilson Company of Cleveland, Ohio, electrical manufacturer and sales agent, has just issued a "demonstrating circular" describing the new "Perfection" sectional switch boxes. On the front cover is shown a cut of the box with walls attached, which when folded back reveals the box with walls removed for ganging.

Joseph Desloge, president of the Killark Electric Manufacturing Company, has left St. Louis, on his way to France to join the American Ambulance Corps, for service on the "Somewhere" front.

Harry J. Hornung has resigned as secretary of the F. W. L. Fullerton Electric Company, Inc., 17-21 East Twenty-second Street, New York City.



This is "Chris" (surname, Litscher), who, as everybody knows, sells electrical supplies to all the 672 furniture factories in his home town of Grand Rapids, and to the makers of the 672 makes of automobiles made in his home State of Michigan. Incidentally, in testimony to Chris' strong golf arm, we might add that the little wrinkled ball he was looking for when this picture was snapped, has not yet been found.



And here we have "The General," as Billy Low always insists on calling him, with that fine regard for military titles which one veteran of many battles graciously accords to another. And General Secretary Franklin Overbagh of the Electrical Supply Jobbers Association is, like Caesar, "a man who can both write and fight, and is equally skilful at either," as every one knows who has ever seen "F. O." skilfully hold a jobbers' meeting to the subject under discussion, or has followed the products of his pen in *The Reminder*, the intimate little magazine he issues "now and then" for E. S. J. A. readers

William H. Crowley, who is now president and treasurer of the new Interstate Electric Construction Company, which has offices at 415 Fuller Building, Springfield, Mass., was recently superintendent for Isador Fajans, electrical contractor at 122 East Twenty-fifth Street, New York City. Prior to that, for a time he was also connected with the Kirtland Electrical Construction Company of Albany, N. Y. J. J. O'Connor is secretary of the new company, which will do a general business in electrical wiring and contracting work.

The Harrington Electric Company, Cleveland, Ohio, has purchased the Warner Electric Company of 331 Frankfort Avenue, that city, and has consolidated both companies in the present quarters at 411-412-413 Caxton Building.

Bayard W. Mendenhall, for more than nine years sales manager for the Utah Light & Railway Company at Salt Lake City, has entered the automobile business in Salt Lake City as local manager for the Miller-Cahoon Company.

Cincinnati Electric Club's New Officers.—The Electric Club of Cincinnati has elected the following officers for 1917: President, J. A. Brett, district manager Westinghouse Electric & Manufacturing Company; first vice-president, L. T. Milner, district manager Western Electric Company; second vice-president, T. E. Wickham, secretary and treasurer Union Gas & Electric Company; secretary and treasurer, O. B. Marsh, manager Federal Sign System (Electric); board of directors, T. J. Creaghead, president Creaghead Engineering Company; Walter A. Draper, vice-president Cincinnati Traction Company; W. J. Hanley, district manager General Electric Company.

M. J. Elgutter, formerly city sales manager for the Interstate Electric Company, New Orleans, La., has acquired an interest in the Electrical Supply Company of the same city, and will immediately assume active charge of the selling organization. Mr. Elgutter is an old electrical supply salesman who knows the electrical supply business thoroughly, and has many friends throughout the entire territory.

Ainslie A. Gray and **Charles L. Benjamin** have joined forces and established a technical and trade advertising business at 608 South Dearborn Street, Chicago, Ill. As general manager of the *Electrical Review* and *Western Electrician* and as past-president of the Electric Club of Chicago Mr. Gray has built up a wide acquaint-



When you tell an Eastern contractor that central stationists and pliers-proprietors mingle in jovial harmony at California gatherings, he registers polite and approximate credulity; so we have focussed a film on J. A. Lighthipe of the Southern California Edison Company in the act of jovially breaking barbecue bread with a group of Native Son electrical contractors and others, during the recent N. E. L. A. convention at Pine Crest Lodge, Cal.



Yes, sir, he's just as common as an old shoe, is that man J. M. Hannaford, Jr. He has a lot of titles, like *sales manager* of the Northwestern Electric Equipment Company of St. Paul, and *son of the president* of the Northern Pacific Railroad and all that stuff. But that don't make any difference. He smokes Bull Durham in a pipe, just like other electrical men. Sometimes he even smokes his pipe at a banquet. Moreover, every electric light and every telephone man in the Northwest knows him and knows about him. Result—More bus. for the N. W. E. E. Co.

tance in the electrical field. Mr. Benjamin's experience in advertising work dates back to the time when he was the first editor of *Printers' Ink*. In 1906 he became advertising manager of the Cutler-Hammer Manufacturing Company and he has devoted his time to technical publicity ever since.

A. V. S. Lindsley has left the Syracuse (N. Y.) Lighting Company in order to take up work in the main office of the Northern Indiana Gas & Electric Company at Hammond, Ind.

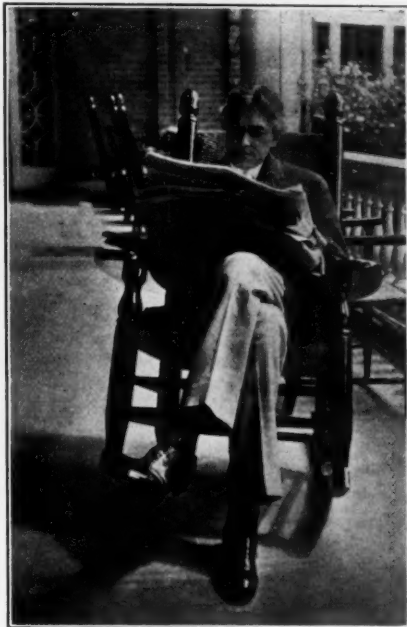
G. D. Longmuir is one of the incorporators of the Reliance Electric Company which has opened a retail store at 909 Pacific Avenue, Tacoma, Wash. Mr. Longmuir has been connected with the Pacific Power & Light Company for several years as district manager of the Columbia River Valley section.

The Charles A. Schieren Company, New York City, manufacturer of Duxbak waterproof and steamproof leather belting, has recently opened branch offices at 72 Congress Street, West, Detroit; 18 South Broadway, St. Louis; 475 South Main Street, Memphis; 272 Marietta Street, Atlanta, in addition to those already established at New Orleans, Dallas, Boston, Philadelphia, Pittsburgh, Chicago, Denver and Seattle.

The Betts & Betts Corporation, 511 West Forty-second Street, New York City, has taken over the manufacturing and selling rights of the Mason monogram talking sign and carriage call which has been marketed in the past by the National Electric Sign Company of Jersey City, N. J., which company recently retired from business. James H. Betts, sales manager for the Betts & Betts Corporation, announces that several important improvements have been made in the operating mechanism of the carriage call, incorporating many of the Betts company's own patented features.

Fred Sintes, superintendent of the electrical department of the W. M. Carney Mill Company of Atmore, Ala., has resigned to accept a position with the Texas Company at Birmingham, Ala.

Norman B. Hickox, who has recently been made advertising manager of the National X-Ray Reflector Company, Chicago, was formerly commercial manager of the Muskogee (Okla.) Gas & Electric Company. An enthusiastic Jovian, Mr. Hickox was recently appointed Statesman-at-Large by Jupiter Henry L. Doherty. In addition to Mr. Hickox's duties in the publicity department, he remains the special personal representative of Augustus D. Curtis, president of the company, in sales-promotion



Hair and feet like these, which so openly betray the native dramatic instincts of a Barrett or a Sir Henry Irving, were plainly never intended for the adornment of a sales manager of the Brookfield Glass Insulator Company. Yet Arthur Lockwood continues to spurn offer after offer from the movie impresarios to do plain and fancy hero stuff and cliff jumping, preferring instead to lead the life of a regular electrical citizen and be "a regular fellow" in the bargain.

work throughout the West. Charles E. Wittmack, formerly in charge of the company's publicity work, has removed to Oshkosh, Wis., where he has accepted a position.

R. E. Flower, who was formerly manager of the electric shop for the Union Gas & Electric Company at Cincinnati, has joined the organization of the Erner Electric Company, Cleveland, Ohio.

Edgar M. Moore & Company, dealers in new and second-hand electrical and steam machinery, Pittsburgh, Pa., are, following recent organization changes, continuing in business at 709 Farmers' Bank Building, Pittsburgh, Pa., with warehouse and yard at 916-922 Behan Street, North Side, Pittsburgh.

"The Pass & Seymour Company manufactures about 12,000,000 sockets a year, besides thousands of other porcelain fittings used in the electrical trades," said Power Engineer M. O. Dell Plain of the Syracuse (N. Y.) Lighting Company, in a recent address on "Industrial Syracuse" before the Technology Club of that city. "Some idea of this company's output can be gathered from the fact that it uses 70,000,000

screws as a part of the product. This constitutes more than one-half of the output of one of the largest screw manufacturers in this country."

Charles M. Crowfoot, formerly district sales manager for the Federal Sign System Electric Company at Cincinnati, Ohio, has been transferred to the company's New York City office. His departure from Cincinnati was made the occasion for a farewell dinner by some forty of his friends, led by F. D. Lawrence, president of the F. D. Lawrence Company.

The Wagner Electric Manufacturing Company of St. Louis announces the appointment of F. T. Coup, formerly connected with its Chicago office, to take charge of its Milwaukee office in its new location in the First National Bank Building.

The Smith Perry Electric Company, Dallas, Tex., will in the future act as distributor throughout Texas and Oklahoma for electric ranges and heating devices manufactured by the Globe Stove & Range Company of Kokomo, Ind.

The Jefferson Electric Company of Chicago announces its removal to new and larger quarters at 426-430 South Green Street.

M. J. Healy, who has been in charge of the meter department of the Lockport (N. Y.) Light, Heat & Power Company, has been appointed commercial manager of that company.



The Kaiser lives in a palace that is absolutely bombproof, and W. H. Merrill has an office that is absolutely fireproof. Some people in the electrical business think that the chief of the Underwriters Laboratories is worse than the Kaiser, and some think he is better. But anyone who has met this genial Chicago gentleman is sure, despite his difficult job, to be numbered among the friends and enthusiasts of his big protective and constructive organization which he guides with as firm and light a hand as he here controls his faithful Dobbin.



Behold Jack Cross—not because his garden groweth weeds apace, but just because as manager of electric heating appliance sales for the General Electric Company at Pittsfield, Mass., that is his name.

The Chicago Fuse Manufacturing Company has issued a booklet covering "Union" automobile fuses and fittings. In the tables are listed the amperage, voltage, number and price of fuses for all makes of American motor cars.

J. S. Baker is the new manager of the Seattle branch of the Clements Manufacturing Company, of Chicago, maker of electric vacuum cleaners and phonographs. The Seattle salesrooms of the company have recently been moved to more commodious quarters at 1324 Fifth Avenue.



Since sprightly sister Susie started spading spuds for soldiers, all the lamp company girls at Nela Park in Cleveland have donned the uniform. And who can say which is the nobler sight, the maidens in their bloomers or the potatoes in their bloom?

E. P. Dillon has been appointed manager of the power department in the New York office of the Westinghouse Electric & Manufacturing Company. Mr. Dillon is a graduate of the University of Colorado, and prior to his identification with the Westinghouse Company in 1909 was connected with the Colorado Springs Light & Power Company.

H. M. West has been appointed commercial manager of the Harrisburg (Pa.) Light & Power Company, succeeding P. H. Dailey. Mr. West for the twelve months preceding his appointment at Harrisburg was with Westinghouse Church Kerr & Company, New York City.

C. D. Montieth is now commercial manager of the Missoula (Mont.) Light & Water Company.

New Home for Hotpoint Club

The Hotpoint Club, which includes in its membership every person on the pay-roll of the Hotpoint Electric Heating Company of Ontario, Cal., now occupies an attractive new bungalow home. The club operates a cafeteria where lunch is served at the noon hour and where midnight refreshments are served to the night shift. The club has its own grocery store, run on a co-operative basis, which makes it possible for employees to purchase their staple groceries at from 10 to 15 per cent below regular retail-store prices. Fruits and vegetables which are raised by the employees are handled through the store at cost.

Besides the cafeteria and store the new clubhouse contains a large assembly room, the caretaker's quarters, and a ladies' rest room.

The Walker Electric & Plumbing Company, electrical contractor, has announced the opening of headquarters at 620-621 Rhodes Building, Atlanta, Ga., with estimating and construction departments, where it is preparing to furnish the same accurate and efficient service that now characterizes its branches at Rome and Columbus, Ga.

The Link-Belt Company, Chicago, has issued a 128-page data book on its silent chains which contains many tables on motor drives of value to electrical engineers, contractors and salesmen. The firm has also published a booklet entitled "The Ideal Drive for Cement Mill Equipment" in which pictures are shown of various machines used in cement making, chain driven by electric motors.

Young & Russell of 1011 Chestnut Street, Philadelphia, have issued a loose-leaf catalog of electric portable lamps. It is planned to send out more plates of this standard size from time to time.

The "R & M Co-operator"—that's the name now! The new house organ of the Robbins & Myers Company, Springfield, Ohio, started under the temporary title of the *R & M Breeze* and in the second issue announced a prize contest for a permanent name. "Ike" Elkas of the company's St. Louis office is now the proud owner of a 12-in. oscillating fan as a result of his fortunate suggestion.

The Crocker-Wheeler Company, Ampere, N. J., has issued bulletins covering its form W rolling-mill motors and its three-wire distribution system. These bulletins are numbered 177 and 178 respectively and the company offers to furnish them free on application.

H. E. Brandli, formerly the general manager of the Citizens' Electric & Heating Company, Mount Vernon, Ill., has been transferred to the Meridian (Miss.) Light & Railway Company, as second vice-president and general manager of the company, which is another Doherty property.

A. B. Patterson, formerly manager of the Meridian company, will open a bond department for the Doherty Company at New Orleans.



When Harry L. Grant quits cultivating customers, all tired out, he takes a whirl at something in the backyard with a hoe, and finds it easier than being Chicago sales manager for the Western Electric Company

The Bright Star Battery Company of 310 Hudson Street, New York City, has issued a new catalog which illustrates its line of Mars Bright batteries and Bright Star flashlight cases. An interesting feature of the battery is the guarantee offered for shelf life, which is graduated according to their size. The Bright Star flashlight cases are equipped with a positive non-short-circuit feature and are provided with a patented contact which gives intermittent or continuous light, as desired.

Charles G. Robin is now sole owner of Charles G. Robin, Inc., dealer in electrical supplies at 48 Warren Street, New York City, having purchased the stock formerly held by Joseph Starobin. Mr. Robin will continue business at the same address where he occupies the entire store, with an upstairs floor used for the storage of stock.

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Self
Light



There is money for you in the mails— if you know how to find it

A good mailing list, good circulars and a carefully planned campaign of live sales letters have brought success to hundreds of merchants. Direct-by-mail advertising brings back good profits when properly conducted.

G-E dealers find the Electrical Advertiser a great help in planning mail campaigns and other forms of local advertising. Special letters will be prepared on request for local use and suitable printed literature supplied as enclosures. All this service is free to those who sell G-E goods.

*If you sell G-E goods and do not get this service—
Write us today*

General Electric Company

Advertising Dept.

Schenectady, N. Y.

REACH OUT FOR

Extend the Radius of Your Sales

THE

Western Electric

"Electricity On Every Farm"

Campaign Makes That Easy For You

Your field for the sale of electrical devices and appliances is not limited to the territory covered by the Central Stations' wires.

Farmers and other dwellers in the outlying country districts are your prospective customers.

This class of people was never in a better position to invest in electrical equipment than now.

Western Electric Company's extensive advertising campaign in the rural papers is continually pointing out advantages of electricity on the farm.

Many thousand copies of our new book entitled "Farmer's Electrical Hand Book" are being distributed.

This is not a campaign primarily to sell the farmer a "make your own electricity" outfit.

Neither is it a mail order campaign.

This Western Electric campaign sends the farmer to his Central Station to find out if he can get current from them.

The HAND BOOK says: "The supply from a Central Station is generally to be preferred, as it greatly widens the range of application and enables the farmer to dispense with engines of any kind."

The HAND BOOK advises the farmer—"to employ an experienced man in wiring his buildings."

Do you realize and appreciate the spirit back of this campaign?

The policy is to assist in creating a demand for electricity on the farm, but not, however, at the expense of the established agencies already existing in the electrical industry;—providing those interests are willing and able to co-operate.

This Western Electric Farm Light Campaign means increased business to those Central Stations and Electrical Dealers that co-operate with this general plan.

The HAND BOOK not only covers the low voltage equipment, which the farmer is advised to use if Central Station service cannot be had, but it catalogs and shows application of the standard 110 volt appliances as well.



SAVE TIME AND FREIGHT

Western Electric Company

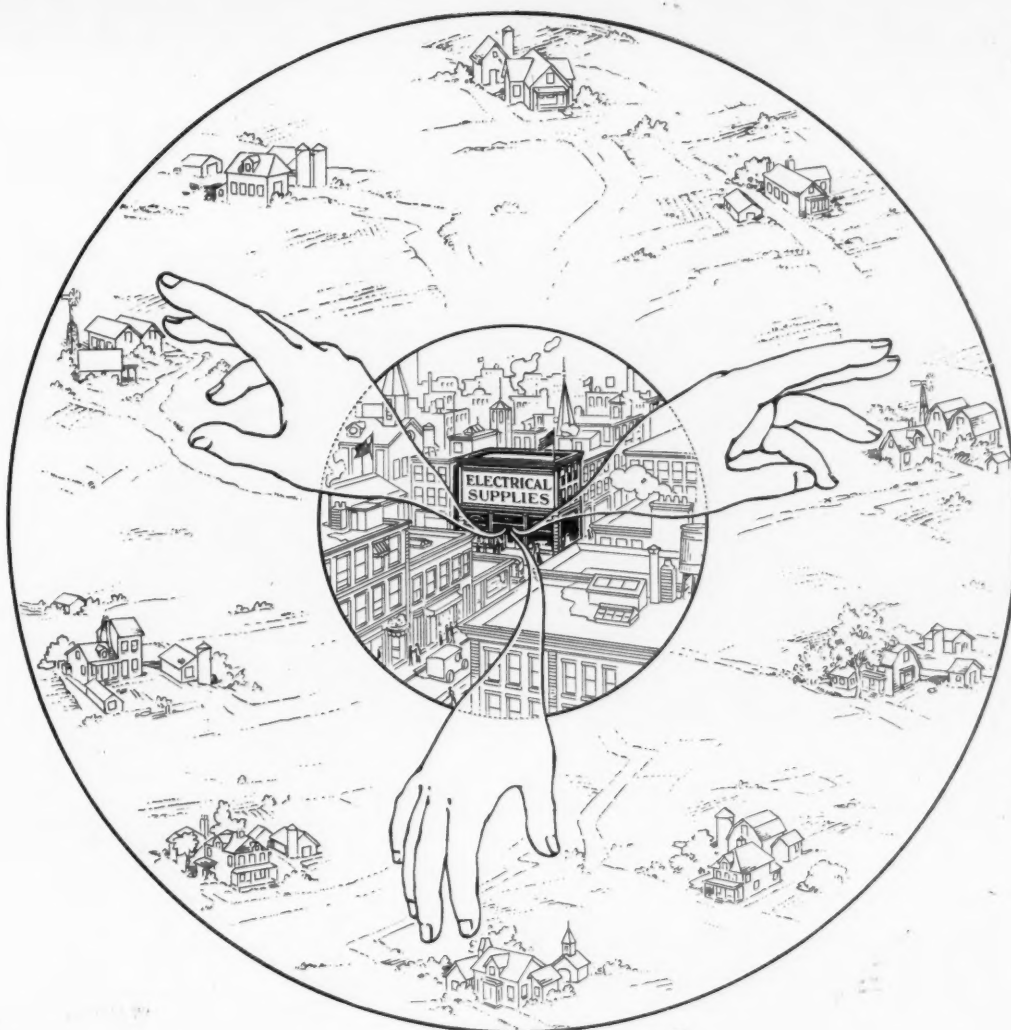
INCORPORATED



New York	Atlanta	Chicago	Kansas City	San Francisco
Buffalo	Richmond	Milwaukee	St. Louis	Oakland
Newark	Savannah	Indianapolis	Dallas	Los Angeles
Philadelphia	New Orleans	Detroit	Houston	Seattle
Boston	Birmingham	Cleveland	Oklahoma City	Portland
Pittsburgh	Cincinnati	Minneapolis	St. Paul	Omaha
			Denver	Salt Lake City

EQUIPMENT FOR EVERY ELECTRICAL NEED

R THE FARM TRADE



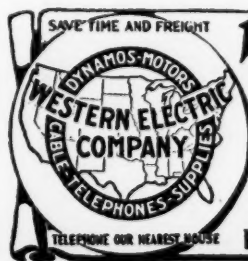
Therefore, Central Stations already covering rural districts will find it profitable to distribute copies of this book.

It will be furnished free to you.

If you have not seen a copy, write for one today.

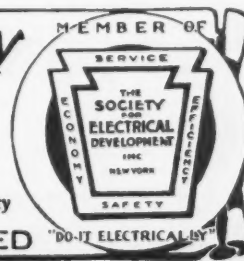
If you have not already signified your willingness to handle inquiries originating in your territory, get in touch with our nearest house today.

It means extending your selling radius.



Western Electric Company
INCORPORATED

New York	Atlanta	Chicago	Kansas City	San Francisco
Buffalo	Richmond	Milwaukee	St. Louis	Oakland
Newark	Savannah	Indianapolis	Dallas	Los Angeles
Philadelphia	New Orleans	Detroit	Houston	Seattle
Boston	Birmingham	Cleveland	Oklahoma City	Portland
Pittsburgh	Cincinnati	Minneapolis	St. Paul	Omaha
			Denver	Salt Lake City

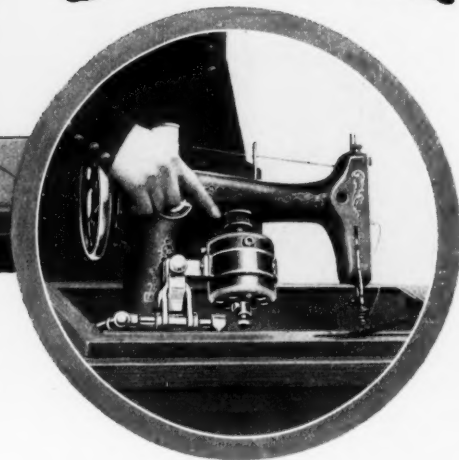


EQUIPMENT FOR EVERY ELECTRICAL NEED

"DO-IT ELECTRICAL-ly"



Strong Selling Features *of the* DUMORE



New and different—its exclusive features make sales easy. Built right in every way—once sold, stays sold—gives you a large margin of profit. Send for a

DUMORE SEWING MACHINE MOTOR

on approval. See how quickly and securely it fastens to any machine—how rigidly it stays in place—how easily the speed is controlled—how it lowers into the cabinet and makes detaching unnecessary.

The DUMORE costs no more than inferior motors and it gives you a larger profit. Let us send you one. Show it to your customers. Keep it 30 days and if you aren't entirely satisfied ship it back at our expense.

WISCONSIN ELECTRIC COMPANY

1265 Dumore Building

RACINE, WISCONSIN

DUMORE Features *That Will Make* Sales For You

Fits any make of sewing machine—fastens securely with thumb-screw adjustment. So easy a child can do it. Stays rigid—strong tension spring holds pulley firmly against hand wheel of the machine. Universal Motor, operating on direct or alternating current. Six distinct speeds—one stitch at a time or 800 a minute.

The Famous
Thor
 Guarantee
 goes with every
Thor
 Machine.



THE ONLY COMPLETE LINE OF ELECTRIC WASHERS,
 VACUUM CLEANERS AND IRONING MACHINES
 A SIZE FOR EVERY FAMILY A STYLE FOR EVERY PURSE
HURLEY MACHINE CO.
 143 W. 42nd Street, NEW YORK 32 S. Clinton Street, CHICAGO

\$17,000

One central-station's Hoover Profits for 1916

The Denver Gas & Electric
Light Company
Denver, Colorado

Oct. 28, 1916.

The Hoover Suction Sweeper Co.,
New Berlin, Ohio.

Gentlemen:-

We feel you will be interested in learning of a thirty day Hoover campaign that we have just brought to a close. In this short period of time, we sold 266 Hoovers, amounting to over \$15,000.00.

You no doubt recall that we conducted a similar campaign in March of this year, and that we were just as successful then. In fact, Hoover campaigns are becoming a habit with us, and we intend to make them a semi-yearly affair.

For the year 1916 we hope to sell \$50,000 worth of Hoovers, realizing a profit of over \$17,000.00.

Before selling your cleaner, we handled well known makes of vacuum cleaners that sold at a much lower price, but we find the Hoover is much easier to sell, owing to its wonderful cleaning efficiency and its durability.

The best illustration we can give you of the easy salability of the Hoover is the fact that in thirty days one of our Representatives sold 52, another 39, and another 32, and so on.

The Hoover is giving perfect service and satisfaction. The motor you use is a wonder and we have never found it necessary to return one to the factory for repairs.

In fact, our connection with your Company has been both profitable and pleasant.

Your very truly,

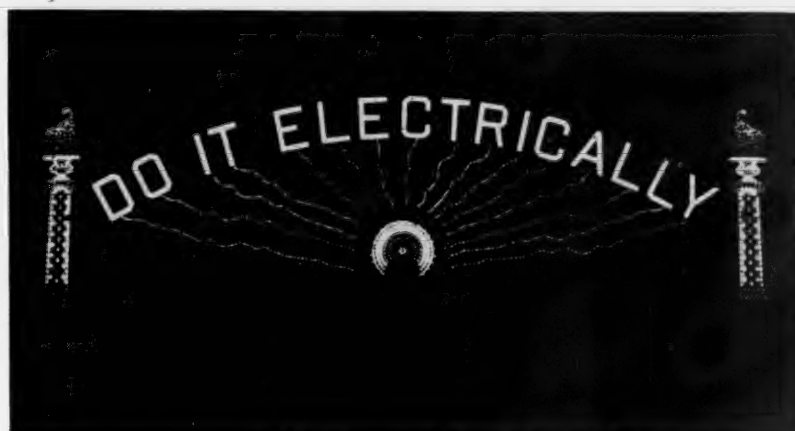
Shirley W. Starnes
Commercial Manager.

THE HOOVER SUCTION SWEEPER

YOU CAN DO IT, TOO!

You can make larger profits on the sale of Hoover Suction Sweepers than you ever dreamed was possible, BY PUSHING THE SALE OF HOOVERS IN AN ORGANIZED WAY. We'll tell you how The Denver Gas & Electric Light Co. and other big sales-makers in the field do it. Just write us. No obligation.

The Hoover Suction Sweeper Co.
Box 913
New Berlin, Ohio



Putting it over with a FEDERAL Electric Sign

The Central Station that believes in the "Do It Electrically" idea strongly enough to apply it to **its own advertising**, is bound to get results.

Those results will be all the greater if the advertising possesses the striking originality that makes FEDERAL Electric Signs unique and nationally famous.

FEDERAL co-operation with the client—or the agent—is as genuine as

FEDERAL quality, and includes evolving new and original sign designs or working out the prospect's idea in practical form, without obligation.

You will be interested in seeing what other Central Stations are doing to increase their sign load. Write for special bulletin No. 10, sent free on request.

Federal Sign System (Electric)

Lake and Desplaines Sts.
CHICAGO

627-649 W. 43rd St.
NEW YORK

618 Mission St.
SAN FRANCISCO

Four Factories
Branches in all the large cities

OHIO

Electric Cleaners

"Standard"

A light-weight, easily operated, conveniently designed, durably constructed cleaner for home use.

"Special"

A large and powerful household machine with fourteen-inch nozzle. For large houses and apartments where fast cleaning is required.

"Janitor"

A still more powerful machine — especially designed for extra-heavy duty. Adapted to service in large buildings, hotels, stores, etc.



**Set a new standard
in vacuum cleaner
convenience and
efficiency**

No matter what the requirements of your prospective vacuum cleaner buyer, you can meet the case with arguments that are "closers" if you handle OHIO vacuum cleaners. Why? —simply because (1st) the OHIO design is the "last word" in vacuum and cleaner convenience and efficiency, and (2nd) the **three** OHIO models enable you to supply a machine of precisely the required power and at a moderate price.

Furthermore, you—and your customer—are absolutely protected. Get our proposition.

THE UNITED ELECTRIC COMPANY

The Wise-Harrod Electric Company—Department O.

CANTON, OHIO

We also manufacture and sell the famous Tuec Stationary Cleaners, more of which are installed than all other types combined

Made to save time and money for the actual consumer—the man on the job—the contractor. The single wall and the “roller-bearing” wireway do the trick.

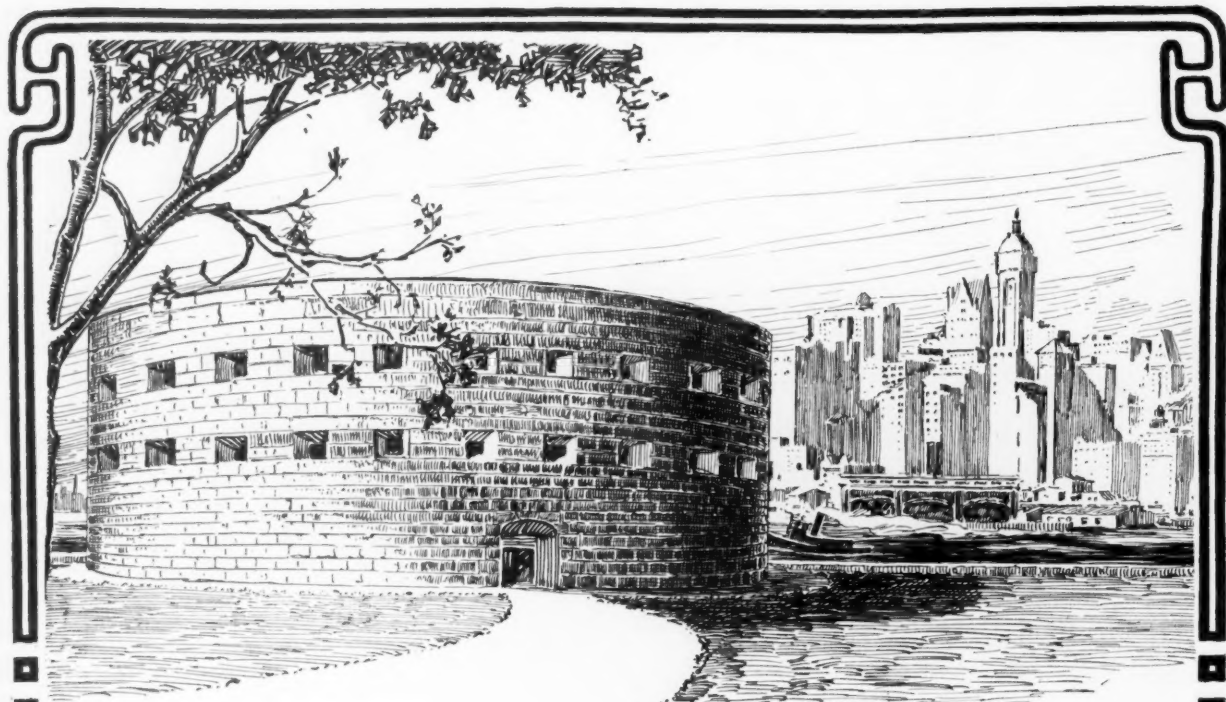
That's why so many ask for

DURADUCT

(Reg. U. S. Patent Office)

—2/8" fishes No. 10 wire

TUBULAR WOVEN FABRIC COMPANY
Manufacturers, Pawtucket, R. I.
General Sales Agent. A. HALL BERRY
97 Warren St., New York 9 So. Clinton St., Chicago
Northern Electric Company Distributors for Canada
LIMITED



Governors Island

Habirshaw carries the current for power, lights and signals—

in government work—in factories — in buildings and homes—all over the world.

HABIRSHAW

"Proven by the test of time"

Insulated Wire

stands for quality in rubber covered wire—and has for more than 30 years.

Year after year it continues to show faithful service in high and low tension work, underground, submarine, aerial—everywhere. You run no risk in specifying and using Habirshaw—

Proven by the Test of Time

distributed by

Western Electric Company
INCORPORATED

Offices in all principal cities



manufactured by

THE HABIRSHAW
ELECTRIC CABLE CO., Inc.

10 E. 43rd St., New York

To the Men Who Sell Mazda Lamps

The Kind of Stories in This Issue

How a salesman overcame a serious handicap and landed a customer who proved to be a \$10,000 buyer.

How by clever salesmanship a salesman changed the method of lighting all the bowling alleys in his town.

A prospective customer didn't have money enough to consider a change to electricity. The salesman timed a visit so as to meet him when he had the money. He got the business.

How a salesman got a church to change its lighting scheme while repairs were being made to church interior.

A story of how a salesman's wife got a wrong match of colors from a dry goods store. The salesman took up the kick with the manager and showed him how his lamps would prevent any further disappointments—sold him, and the merchant advertised his new color matching lamps.

Real Sales Stories Each Month

What more helpful influence in your selling can you obtain than the details of how some salesman has successfully secured the very same kind of contract you are working on now

—and the very same kind of business you will go after tomorrow.

Purely as a help to those who sell any make of Mazda lamps we publish "How-I-Did-It" monthly. The successful selling stories it contains are written by lamp salesmen for lamp salesmen.

If you are not regularly reading "How-I-Did-It" get your name on our mailing list now. It is

SENT GRATIS

How the Stories are Secured

Every salesman employed by a central station, dealer or contractor is requested to send in the story of his most interesting sale of lamps. Each month we pay \$15.00 for the best story and \$10.00 for the second best. For every other story we accept we pay \$2.00 each. The book of rules governing the contribution of stories will be sent on request.

Guaranteed by the Name

Westinghouse Lamp Co.

Atlanta
Baltimore
Boston
Chicago
Cincinnati
Cleveland

Columbus
Dallas
Denver
Detroit
Kansas City
Los Angeles

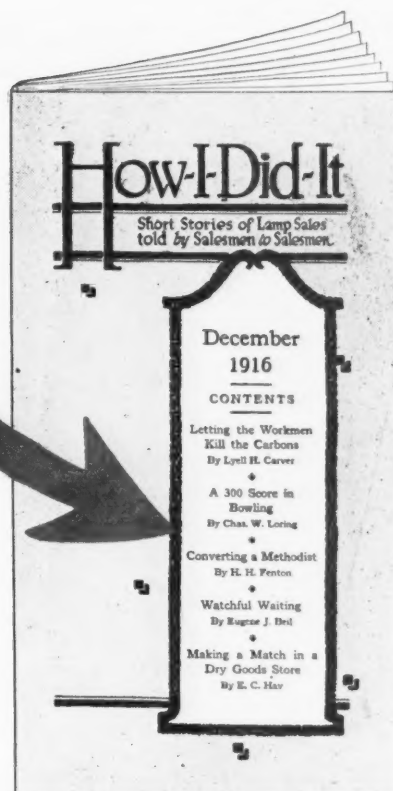
Milwaukee
New Orleans
New York
Philadelphia
Pittsburgh
Portland

St. Louis
Salt Lake City
San Francisco
Seattle
Syracuse

*Westinghouse Lamp Corporation.

Export Sales Dept., 165 Broadway, N. Y. C.

For Canada—Canadian Westinghouse Co., Limited, Hamilton, Ont.



Westinghouse

Splash-Proof Motors

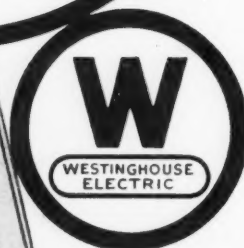
For Washing Machines—Pumps and Similar Service



Notice the solid top of protecting brackets. Makes motor practically enclosed and keeps it dry.

Air rushes through these protected vents and keeps motor exceptionally cool.

Very large grease cups and bearings mean long life and infrequent lubrication.



Perfect protection against shock. A cord and plug supplied with each motor.

Specify Westinghouse Splash-Proof on your next order for Washing Machines and protect your customers against motor difficulties.

Send for Folder 4337.

Westinghouse Electric & Manufacturing Company
East Pittsburgh, Pa.

UNIVERSAL HOME NEEDS

Universal Four Heat
Grill. No. E984, \$6.50



UNIVERSAL

Universal Talking Points

The safety fuse plug feature of Universal liquid heating appliances leads all arguments advanced for other makes and is one of the unanswerable reasons for Universal supremacy.

The care expended in the construction of the heating unit for all Universal electric home needs results in a minimum amount of operating trouble reported to the dealer.

In each case all the heat generated is directly utilized so that every utensil operates with an exceedingly low consumption of current.

LANDERS, FRARY & CLARK
New Britain, Conn.

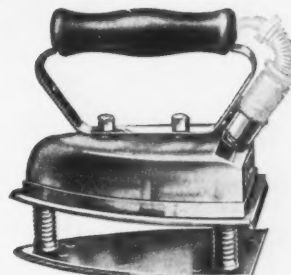
No. E9106, 6 cup, \$16.00.
E9109, 9 cup, \$18.00
Universal Electric Urn



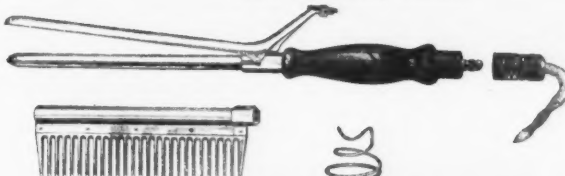
No. E9635, 5 cup, \$8.50
E9637, 7 cup, \$9.00
Universal Electric Percolator



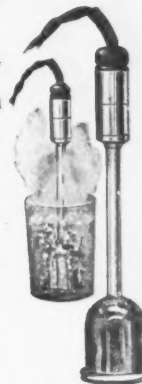
No. E940, \$16.50
Universal Electric Chafing Dish



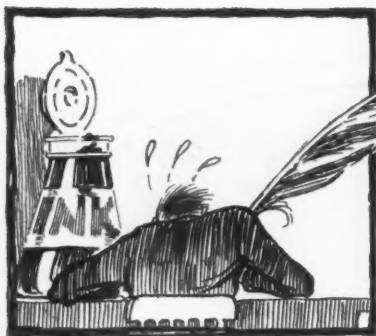
Universal Electric Iron
No. E905, \$4.50



Universal Electric Curling Iron
No. E989, \$3.75. No. E9891, with comb, \$4.50



Universal Immersion Heater
No. E970, \$4.00



Bingles from the B.M.'s Bat

A page for readers and advertisers edited, and mostly written, by the Business Manager. . . .

From the human bore—deliver us!

And one of these is the man who tries to lead us into discussion on a topic with which we are unfamiliar.

We hesitate to admit ignorance—so we change the subject to one on which we both have a smattering of knowledge.

Then we can settle down on the soft upholstery and open up with mutual interest and understanding.

It is often easy for the salesman to play the part of a bore if his prospective customer is not familiar with the goods or any of the business considerations in buying, stocking or handling them.

If all salesmen would see to it that the men they call on are given real viewpoints in advance of the call, there would be no necessity for them to tell their stories standing up and near the door.

This may help to explain why the man who sells properly advertised products closes quicker, oftener and bigger.

Advertising can be made to have an octopus sweep in sowing sure-growth sales seeds.

"Yes," explains the hidebound local manufacturer, "but that kind of advertising requires vision and brains."

Well—that's true—it does.



Profitable Sellers at all Times

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LONGEST LIFE"

NOVO BATTERIES

FOR ALL FLASHLIGHTS

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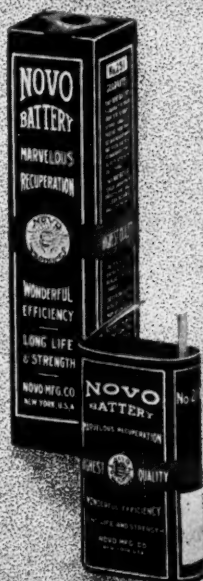
A battery that will not corrode on your shelf is profitable to you in many ways.

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The boiled down facts about electrical practice of today

For the dealer, the worker, all who must have a knowledge of electricity.

Straight to the heart of actual electrical work. There the Home Study Course in Practical Electricity will take you. You are guided along a straight and clearly defined path by the skill of the author, who is a long experienced and thoroughly trained man. He tells you what you want to know about electricity—what you must know to master the practical side of it.

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It has done and is doing its work so well that it is now the daily guide of thousands of men—both electrical workers, and those who have only occasional use for a knowledge of electricity—because the information is in compact form, easily accessible, understandable, accurate and up-to-date, and is in question and answer form.

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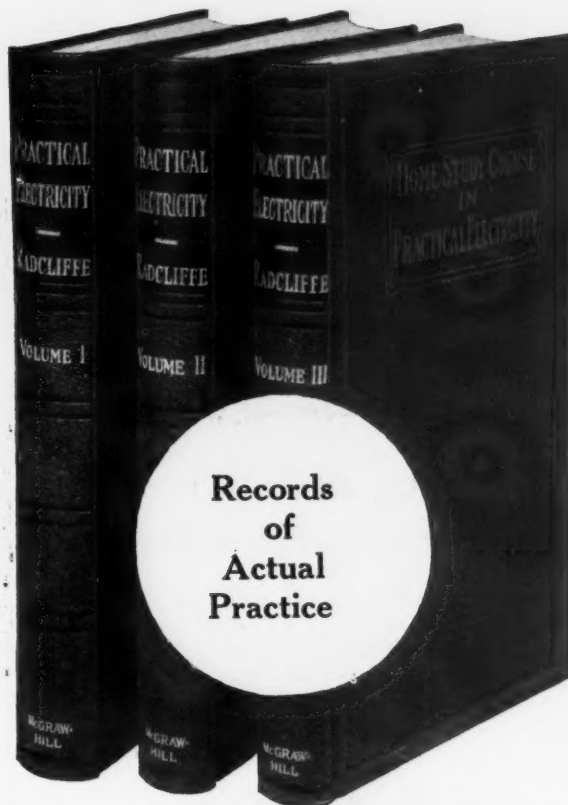
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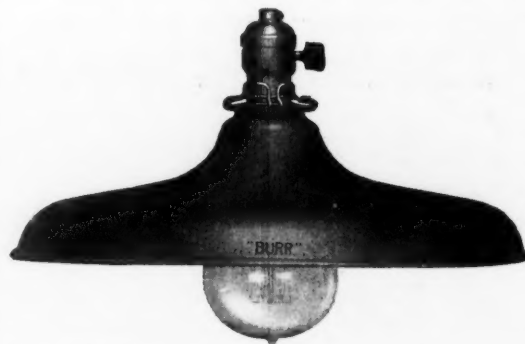


**One-quarter Turn Locks the Shade—
Will Not Come Off Until Released**

Now is the time to sell better illumination to industrial plants. Dark days and early sunsets make the defects of poor lighting more obvious. Good lighting is a matter of dollars and sense in increasing production and preventing accidents.

Faries shades are made in all types and for all conditions. Our shade bulletin No. 2 gives prices and full information. Send for it and get this business now while the getting is good.

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DECATUR, ILL.



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—easier to
**STOCK, SELL
and INSTALL**



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For use with
small types—
Bowls
Angles
Domes

Each unit—is made up from standardized, interchangeable, low-cost parts. That makes Burr Units simple and economical to stock.

From such parts a unit can be built up to exactly fit stated requirements.

That makes Burr units simple to figure on and to sell.

And Burr units *do* render service of an exceptional character.

That is why they are called *efficiency* units.

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It is free.



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For use with
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Sockets focus to
all sizes of lamps.

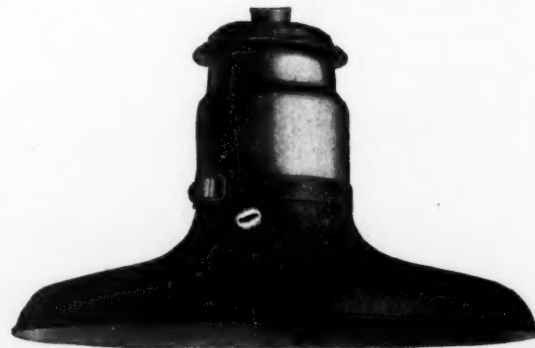
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Cleveland, Ohio

Central Sales Agents

Leader-News Bldg., Cleveland

New York Office and Stock, 114 Liberty Street



Think-of-This—



Every merchant, every householder has just received his biggest electric light bill. The cost of light means more to him right now than at any other time. Go to these men and sell them

FRANKLIN Mazda Lamps

Figure out for them what they can save in cash. Show them where the sturdiness of Franklin Mazdas will save them further money on the cost-of-lamps. Make them appreciate why Franklin customers are satisfied.

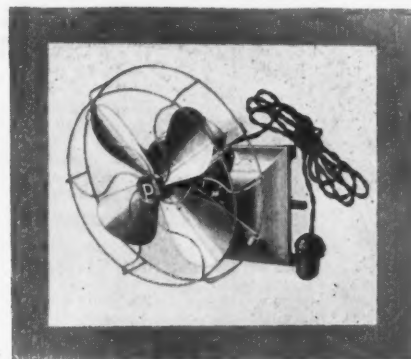
This opportunity will win you new accounts—new friends—who will buy more than lamps.

Begin Today

The Franklin Electric Mfg. Co.

Hartford, Conn.

Remember—
The Name of Franklin
Helps You Sell.....



Small Fans for a Big Fan Business

PEOPLE demand small fans to-day. They have learned that a smaller and lighter fan will do the trick, and they are delighted to get away from bulk and weight.

When the season is over a large fan always presents a serious storage problem, while there are a dozen places to store away the small fan.

As for breeze—put a Pittsburgh "Eight" or "Six" on your own desk and try it out. Yes, the small fan gives ample breeze for the majority of people, and it's what they want.

One thing more, they want fans that are more graceful and more attractive.

Realizing these demands, we are specializing this year on three small types.

Pittsburgh "Eight"
8 in. blades—weight 5¾ lbs.

Pittsburgh "Six"
6 in. blades—weight 3¾ lbs.

Pittsburgh "Little Giant"
4 in. blades—weight 2½ lbs.

These fans are the last word in fan design. They combine grace, beauty, and light weight with efficiency, simplicity, and durability.

They all have universal motors—consequently you don't have to carry A. C. and D. C. fans. You can have them in full nickel or black japan with brass blades, as you prefer.

If you want to sell a large number of fans this season, you certainly can't do better than to handle this attractive line.

Write for Literature

Pittsburgh Electric Specialties Co.
Pittsburgh, Pa.

ARCA LAMPS

EVERY LAMP IS FITTED WITH A
PRISMATIC CONVERTIBLE REFLECTOR

Proved 115% Superior

Here are results of a test conducted by Electrical Testing Laboratories.

ARCA lamp, with one 75-Watt bulb, 704 zonal lumens.

Ordinary portable, without reflector, fitted with three 25-Watt bulbs, 328 zonal lumens.

Superiority of ARCA light, 114.5%.

ARCA lamp, apparent candle power, 56.2.

Ordinary portable, apparent candle power, 26.1.

Superiority of ARCA light, 114.5%.

Give 100% Service and Profit

No additional light is needed in the room where an ARCA lamp is in use. That's 100% service.

Each ARCA lamp embodies true principles of illumination and decoration and these principles are so evident that the lamps look reasonable at double your cost.

That's 100% profit.

And lamps are equipped with the only convertible reflector—for either Direct or Semi-Indirect Lighting.

Order one NOW and prove to your customers and yourself the superior qualities of this superb lamp—Get our complete catalogue.

United Arts and Crafts Workers
129 Fifth Avenue, New York

"SAN TOY"

Arca Lamp 537

A Steady Seller at 100% Profit



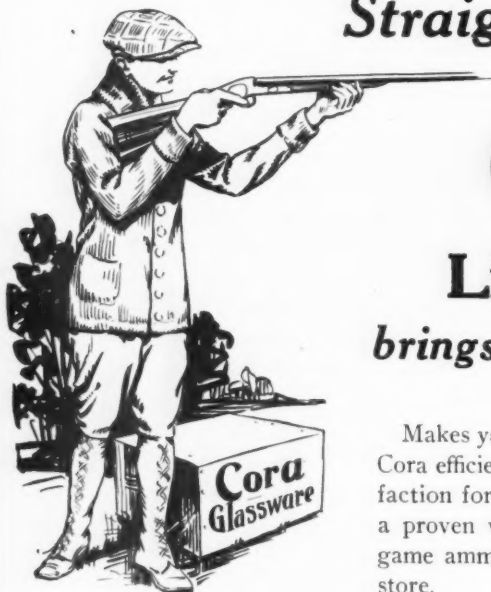
Dealer's Price
\$14.75



The only convertible reflector, for direct or semi-indirect lighting.
ARCA costs *no* more than ordinary lamps.

Socket Appliances and

Straight to the Mark



CORA

Lighting Glassware

brings profits—the aim of every dealer

Makes your sales top new high records. Cora efficiency hits the bull's eye of satisfaction for your customers—its beauty is a proven winner. Cora is the best big game ammunition you ever had in your store.

A Real Sales Help

Catalogue No. 44 is a help to you and an aid to your customers in finding the right lighting glassware. Write for a copy today.



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BOSTON, MASS.
164 Federal Street
BUFFALO, N. Y.
525 Main Street

HAMILTON, ONT.
62 King Street, East
CHICAGO, ILL.
17 No. Wabash Ave.

CINCINNATI, OHIO
141 East 4th Street
PITTSBURGH, PA.
702 Second Nat. Bank Bldg.

PORTLAND, ORE.
233 Sherlock Bldg.
LOS ANGELES, CAL.
347 Pacific Elec. Bldg.

The Reflectors of Utility and Value!



Holder Socket, Dome Type
Abolite

ABOLITES

The porcelain-enameled reflectors that make good with users, engineers and architects, contractors and jobbers

Abolites always lead for best and uniform results. Low maintenance cost for both lamps and reflectors.

The Abolite line is complete and of A-B make throughout. Each unit possesses all desirable characteristics in the best proportionate degree.

And now Abolites are porcelain enameled in our own new vitreous enameling plant. Our increased facilities mean better product and service.

Have you a copy of Catalogue 137-A?



Shade Holder, Dome Type
Abolite



Holder Socket, Bowl Type
Abolite



Holder Socket,
Diagonal Type
Abolite

The Adams-Bagnall Electric Co., Cleveland, Ohio

Manufacturers of
Electrical Apparatus with both
Merchandising and Engineering Merit

Industrial, Commercial and Street Lighting Equipment;
Distributing Power and Constant-Current Transformers;
Gyofans; Oscillating Fans; Auto Electrical Accessories

Write now for data or quotation on your requirements!

Pocket Appliances

Better Service and Profit from FLASHLIGHTS and BATTERIES

ARCA flashlight batteries are simply top-notch batteries furnished in all sizes.

The shelf and service life are definitely stated.

The only unusual thing about them is the price.

That, we are enabled to make low enough to make it profitable for you to handle them.

Write for bulletin and schedule of life.

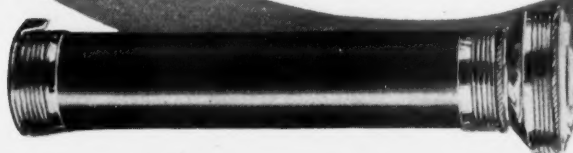
ARCA Flashlight cases are made in all sizes—black and nickel. But mark these individual features. We use nothing but pure fibre. We do not substitute a paper filling under the guise of fibre. Reflectors are silver plated. Our patented switch prevents short circuit.

A high percentage of profit for dealers.

You can get the full stock line from

United Arts and Crafts Workers
129 Fifth Avenue, New York

Write for the dealer proposition.



Wire Up Those Unwired Houses

The Problem Solved

Well founded estimates show that 92 per cent of all buildings in this country are unwired. In the development of this business the *Central Station, Dealer and Contractor* have an almost limitless field.

Electrical Merchandising recognizes this and will publish in 1917 hundreds of articles on the *wiring of finished buildings*. The technical and practical problems will be included with articles and data of prime interest to you in securing this profitable business.

Every man interested in securing his share of the profits should read Electrical Merchandising. He should have it in combination with—

“Wiring of Finished Buildings”

By TERRELL CROFT

Author of “American Electricians' Handbook”

275 pages, 5½ x 8, over 200 Illustrations, \$2.00 (8/4) Net, postpaid.

This book is a text-book of compiled and tested data—a most valuable reference book. Terrell Croft tells in this book how to develop the enormous possibilities in the field of unwired buildings. He covers both the commercial and technical problems. The commercial section covers advertising, with reproductions of successful campaigns, solicitation of business, etc. The technical section covers methods of wiring, tools, manipulation, fixtures, etc., with examples of successful installations. This book not only is absolutely new and authoritative, but the only book of its kind in print.

Free Examination—No Risk

You can get this book, in combination with Electrical Merchandising, at a liberal saving, and with the privilege of returning it in ten days if not satisfactory.

Special Combination Trial Offer

(For Old and New Subscribers)

“Wiring of Finished Buildings”	\$2.00	Special Combination Price	Saving
One year's subscription to <i>Electrical Merchandising</i>	2.00		
Value.....	\$4.00	\$2.20	\$1.80

These prices apply in the United States and possessions and Cuba

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2. Advertising
3. Solicitation
4. Policies
5. Examples of Campaigns
6. Costs and Prices
- Appendix to Commercial Section

TECHNICAL

7. Methods of Wiring
8. Planning Installation
9. Tools and Manipulation
10. Examples of Installation
11. Fixtures

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1-15-17

Enter my subscription under your special offer. I agree to return the book or remit the \$2.20 within 10 days. If I return the book this order is automatically cancelled.

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NATURE OF BUSINESS OF COMPANY.....POSITION HELD.....

Double your Profit on Heating Appliances

We have a full line of high grade electrically heated appliances, both domestic and factory.

No Price Restriction

No Patent Regulation

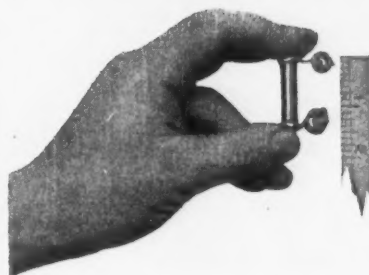
Every appliance guaranteed free from liability under the Marsh Patents on Resistance Wires.

Lowest Prices in the U.S.A.

Other manufacturers have to uphold a price. You can sell our goods—at a profit—for less than other lines cost you. Start the New Year Right and Make Money on Heaters. Sell a large volume at a moderate price and a good profit, not a small volume at a high price and a small profit. Consider the Ford and the Packard. Write for prices today.

Russell Electric Company
140 W. Austin Ave. Chicago, U.S.A.

WARD LEONARD Enamelled Resistance Unit



**A 3000 Ohms Resistance in a
Unit $\frac{5}{16}$ " Wide by $1\frac{3}{8}$ " Long**

Each unit is composed of a porcelain tube wound with a special resistance wire of practically zero temperature co-efficient. The tube after being wound with wire is covered with a vitreous enamel which holds the wire firmly in place. The copper connecting wires or terminal leads consist of round copper braids each composed of a large number of flexible copper wires. Grounding is absolutely impossible as the support is composed of the most perfect insulating material. The finest wire when properly embedded in the special enamel used for these Ward Leonard resistance units is entirely free from any mechanical strain due to the heating and cooling and is perfectly protected against all oxidation or other chemical depreciation, such as is invariably met with where fine wires are exposed to the air at any part of their length or are embedded in any materials such as cement, japan, shellac or any other insulating material thus far used, with the single exception of enamel.

Ward Leonard Electric Co.
Mt. Vernon, N. Y.

The Apex
TRADE MARK REG.

Electric Suction Cleaners

SO MANY EXCLUSIVE FEATURES,—and giving such universal satisfaction,—as to well earn the title,—“Most talked of Vacuum Cleaners on the market!”

Dealers and jobbers in unrepresented territories should get our money-making proposition,—sample machine on consignment for FREE TRIAL if you mean business.

The Apex Electrical Mfg Co
1111 Power Ave.
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REGISTERED UNDER
HENNEY PATENT
MARCH 1917



THE “AMERICAN BEAUTY” ELECTRIC IRON

When your customer demands something more than a plain electric iron; when she wants an iron that is guaranteed for all time, finished to the highest degree possible, balanced to a fraction of an ounce; in fact when she demands a “SUPER IRON” sell her an

“AMERICAN BEAUTY”

The Best Iron Made.

Catalog and discounts upon request.

American Electrical Heater Company
Detroit, U. S. A.

Oldest and Largest Makers in the World

For Underground Equipment and Appliances

use the

"Cope"
Catalogue on request.

Cable Rack
Bond Plate
Winch
Guard Rail

Conduit Rod
Bond Wire
Capstan
Cable Reel Jack
etc., etc.

T. J. COPE, 1620 Chancellor Street, Philadelphia, Pa.

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Century

Repulsion Start—Induction

SINGLE PHASE MOTORS

are of such design that a large part of the usual magnetic hum has been eliminated.



Then the brushes are removed from the commutator after they reach full speed, which does away with the objectionable scraping and whistling.

They are very popular for the operation of organ blowers, vacuum cleaners, heating and ventilating fans.

1/10 to 40 H.P.—25 to 140 Cycles

CENTURY ELECTRIC COMPANY

19th, Pine to Olive Streets St. Louis, Mo., U.S.A.

Sales Offices in Principal Cities

(215)



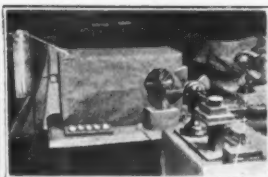
THE MYSTIC ADVERTISING DEVICE

A MARVELOUS ATTRACTION—100% PUBLICITY—the kind that brings your merchandise, your products, your special sales and the announcements of your store to the attention of the public when they are at your portals. We believe that if this can be accomplished, it is 100% efficiency in advertising.

You may have the most attractive stores, the finest windows and the season's newest creations in merchandise, but if you cannot stop and hold the people, then you are not deriving the returns possible from the window display in your store. If you can stop and hold the attention of 80% of the public that passes your window, would you not consider it a marvel?

THE MYSTIC ADVERTISING DEVICE will perform this miracle. It will put animation into your windows. None can escape those equipped with our Mystic Device. It interests everyone, everybody, everywhere. It is the greatest salesman ever employed in merchandising, and can be used the year 'round.

The New Method Advertising Co., 47 W. 34th St., New York City

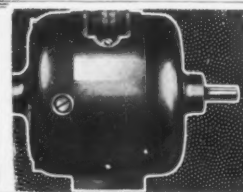


MR. DEALER In arguments with customers you need PROOF!

When disputes with customers arise over performance or fitness of electrical apparatus, don't argue—get the PROOF. Let us test the article. Our impartial and authoritative report settles the matter—satisfies all—at small cost.

LET US UMPIRE YOUR DISPUTES

Electrical Testing Laboratories, 80th Street and East End Avenue, New York City



DUMORE Fractional H-P MOTORS
FROM 1/100 TO 1/6 HP—A HIGH-GRADE MOTOR
For Every Purpose. Universal. Operates On A.C. or D.C.
WRITE FOR LITERATURE
Wisconsin Electric Co. Dumore Bldg. Racine, Wis.

Do You Etch or "Frost" Glass?

If you do, you need Etch-O-Lite.

It will prevent injuries to your men—allow you to use cheap, unskilled labor—it will improve your work—and it takes but a fraction of the time consumed by acid or sand-blasting.

Tests have proven that Etch-O-Lite will save you 50% or more under average conditions.



Order a small amount for trial—put up in 5 lb. and 10 lb. containers—or ask us for further data as applied to your work.

UNION ELECTRIC COMPANY

Sole selling agents for United States

Terminal Warehouses Pittsburgh, Pa.

"UNION" ELECTRICAL PROTECTING MATERIAL

A Good Fuse is like Reliable Insurance, not an Expense but an Investment, and proves itself so in time of need by giving the protection paid for.



"Union" Fuses are made to safely carry their specified load but to promptly and safely open the circuit when the prescribed overload is reached. Opening on less current would be a needless expense to the user, and requiring more would rob him of the protection that he has a right to expect for his apparatus.

Write for Catalog No. 28

CHICAGO FUSE MFG. CO.

CHICAGO NEW YORK

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The Annual Meeting of the Stockholders of the McGraw Publishing Company, Inc., will be held at the office of the corporation, 239 West 39th Street, New York City, Wednesday, January 17, 1917, at 10 o'clock in the forenoon for the election of Directors, and such other business as may properly come before the meeting.

A. E. CLIFFORD,
Secretary.



SELL BRIGHT EYE

QUALITY
ELECTRIC LANTERNS

Long Distance Spotlights are made in many styles for a thousand uses.

Write your local Jobber to-day, or
BURCHWELL MANUFACTURING CO.
Pontiac Bldg., St. Louis

San Francisco Representative, N. Abrams, 285 Minna St.
Chicago Representative, Sternberg & Co., 180 N. Dearborn St.

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Stock Taking Time

Now is the time to turn the surplus stock of metals you have on hand into cash. We buy all grades of scrap metals, small lots as well as large lots. Write us today and tell us what you have and we will be pleased to quote you prices. National Metal & Rubber Company, 30-31 India Wharf, Boston, Mass.

Typewriters for Sale or Rent

All makes factory rebuilt by famous "Young Process." As good as new, look like new. Our big business permits lowest cash prices; \$10 and up. Also machines rented, or sold on time. No matter what your needs are we can best serve you. Write and see—now. Young Typewriter Co., Dept. 1252, Chicago, Ill.

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Established Business for Sale

The best electric wiring and fixture shop in Milwaukee. Established 20 years; large trade in city and state. Other interests demand our attention. Will sell cheap. A great opportunity. Address Henry J. Wright, Apartment 5, 150 Biddle St., Milwaukee, Wis.

POSITIONS VACANT

Can You Use a Good Man?

Men who are ambitious for larger opportunities—who are competent to fill better positions than they now have—can be reached through little announcements under the heading "Positions Vacant"; cost 5c. a word, minimum charge \$1.50 an insertion.

AGENTS AND SALESMEN

Lighting or Sales Agent

An A-1 Central Station salesman with 8 years' experience, desires connection with Central Station as lighting salesman or sales agent. References and ability upon request. Box 31, Elec. Merchandising, 935 Real Estate Trust Bldg., Philadelphia, Pa.

Salesman Wants Position

Salesman returning to South America February, desires line of electrical flashlights or small electrical novelties, to sell on straight commission basis. Box 32, Elec. Merchandising.

Salesman Wanted

Retail Electric Store Salesman in large Ohio city. Address Box 33, Elec. Merchandising, 1570 Old Colony Bldg., Chicago, Ill.

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Those concerns which advertise in Electrical Merchandising put their products in the Spot-light of Publicity and live up to the claims they make. They are listed below.

Batteries, Dry. Interstate Electric Novelty Co. Novo Mfg. Co. United Arts & Crafts Workers. Western Electric Co. Books, Electrical and Technical. McGraw-Hill Book Co. Boxes, Fuse. General Electric Co. Boxes, Junction and Outlet. General Electric Co. Cable Bond Plates. T. J. Cope. Cable Clamps. Union Elec. Co. Cable End Bells. T. J. Cope. Cable Racks. T. J. Cope. Cable Winches. T. J. Cope. Circuit Breakers. General Electric Co. Westinghouse El. & Mfg. Co. Cleats. Pass & Seymour, Inc. Clusters. Federal Sign System (Electric). Conduit, Flexible. Tubular Woven Fabric Co. Conduit, Interior. Tubular Woven Fabric Co. Conduit Fittings. Pass & Seymour, Inc. Conduit Rode. T. J. Cope. Controllers, Motor. General Electric Co. Westinghouse El. & Mfg. Co. Cooking Appliances, Electric. American Electrical Heater Co. General Electric Co. Landers, Frary & Clark. Russell Electric Co. Western Electric Co. Westinghouse El. & Mfg. Co. Electro Magnets. Ward Leonard Elec. Co. Fan Motors. Adams-Bagnall Electric Co. Century Electric Co. General Electric Co. Robbins & Myers Co., The. Western Electric Co. Westinghouse El. & Mfg. Co. Fans, Exhaust and Ventilating. Adams-Bagnall Electric Co. Robbins & Myers Co., The. Westinghouse El. & Mfg. Co. Fixtures, Electric and Gas. Adams-Bagnall Electric Co. Faries Mfg. Co. Federal Sign System (Electric). Flashlights. Burchwell Mfg. Co. Interstate Electric Novelty Co. United Arts & Crafts Workers.	Fuses. Chicago Fuse Mfg. Co. General Electric Co. Western Electric Co. Westinghouse El. & Mfg. Co. Fuses, Refillable. Federal Sign System (Electric). Glassware, Illuminating. Consolidated Lamp & Glass Co. Globes, Shades, etc. Adams-Bagnall Electric Co. Consolidated Lamp & Glass Co. Faries Mfg. Co. Gleason-Tiebout Glass Co. Heating Devices, Electric. American Electrical Heater Co. Landers, Frary & Clark. Pittsburgh Electric Specialties Co. Russell Electric Co. Western Electric Co. Westinghouse El. & Mfg. Co. Instruments, Electrical. General Electric Co. Westinghouse El. & Mfg. Co. Insulating Materials. General Electric Co. Westinghouse El. & Mfg. Co. Ironing Machines, Electric. Hurley Machine Co. Irons, Electric. American Electrical Heater Co. Pittsburgh Electric Specialties Co. Russell Electric Co. Westinghouse El. & Mfg. Co. Lamp Locks. Pass & Seymour, Inc. Lamps, Arc. Adams-Bagnall Electric Co. General Electric Co. Westinghouse El. & Mfg. Co. Lamps, Frosting. Union Electric Co. Lamps, Incandescent. Edison Lamp Works. Franklin Elec. Mfg. Co. General Electric Co. National Lamp Works. Westinghouse Lamp Co. Lamps, Portable. Faries Mfg. Co. United Arts & Crafts Workers. Lanterns, Battery. Interstate Electric Novelty Co. Lighting Units. General Electric Co. Westinghouse El. & Mfg. Co. Line Material. General Electric Co. Western Electric Co. Westinghouse El. & Mfg. Co.	Motors, A. C. Century Electric Co. General Electric Co. Robbins & Myers Co., The. Western Electric Co. Westinghouse El. & Mfg. Co. Motors, D. C. General Electric Co. Robbins & Myers Co., The. Western Electric Co. Westinghouse El. & Mfg. Co. Motors, Fractional H. P. Westinghouse El. & Mfg. Co. Wisconsin Electric Co. Panel-boards. Adams-Bagnall Electric Co. General Electric Co. Westinghouse El. & Mfg. Co. Plugs, Attachment. Pass & Seymour, Inc. Pole Line Hardware. Western Electric Co. Westinghouse El. & Mfg. Co. Protective Devices, Electric. General Electric Co. Westinghouse El. & Mfg. Co. Ranges, Electric. General Electric Co. Westinghouse El. & Mfg. Co. Receptacles. General Electric Co. Pass & Seymour, Inc. Receptacles, Sign. Federal Sign System (Electric). Westinghouse El. & Mfg. Co. Rectifiers, Mercury Arc. General Electric Co. Westinghouse El. & Mfg. Co. Reflectors. Adams-Bagnall Electric Co. General Electric Co. A. B. Wilson Co. Resistance Units. General Electric Co. Ward Leonard Elec. Co. Westinghouse El. & Mfg. Co. Rheostats. General Electric Co. Ward Leonard Elec. Co. Westinghouse El. & Mfg. Co. Rosettes. Pass & Seymour, Inc. Searchlights, Electric Auto, Etc. Pittsburgh Electric Specialties Co. Shade Holders. Adams-Bagnall Electric Co. A. B. Wilson Co. Signs, Electric. Federal Sign System (Electric). New Method Advertising Co. Sign Letters. Federal Sign System (Electric).	Sirens, Motor. Federal Sign System (Electric). Sockets. General Electric Co. Pass & Seymour, Inc. Supplies, Electrical. General Electric Co. Western Electric Co. Westinghouse El. & Mfg. Co. Switchboard Fittings. General Electric Co. Westinghouse El. & Mfg. Co. Switchboards. General Electric Co. Western Electric Co. Westinghouse El. & Mfg. Co. Switches. General Electric Co. Pass & Seymour, Inc. Westinghouse El. & Mfg. Co. Switches, Time. Westinghouse El. & Mfg. Co. Telephones. Western Electric Co. Testing Laboratories. Electrical Testing Laboratories. Westinghouse El. & Mfg. Co. Testing Service, Electrical. Electrical Testing Laboratories. Theater Dimmers. General Electric Co. Ward Leonard Elec. Co. Tools, Linemen's. Western Electric Co. Westinghouse El. & Mfg. Co. Tools, Portable Electric. Wisconsin Electric Co. Tools, Underground Conduit. T. J. Cope. Transformers. Adams-Bagnall Electric Co. General Electric Co. Westinghouse El. & Mfg. Co. Vacuum Cleaners, Electric. Apex Electrical Mfg. Co. Hoover Suction Sweeper Co. Hurley Machine Co. United Electric Co. Western Electric Co. Wisconsin Electric Co. Washing Machines, Electric. Hurley Machine Co. Western Electric Co. Window Displays, Electric. New Method Advertising Co. Wires and Cables. General Electric Co. Habirshaw Elec. Cable Co., Inc. Western Electric Co. Wiring Devices. General Electric Co.
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Save This Issue Because—It is the intention of the publishers of *Electrical Merchandising* shortly to present a new form of index of unusual value to readers. To get full benefit from it, it will be necessary for you to save each issue.



Getting the Electrical Contract for That Job

is largely just a matter of *salesmanship*.

Making "bids" is not the only way to get a contract. Frequently it is the worst way, especially in the face of cut-throat competition.

The customer's interest in the kind of workmanship and the quality of materials you are going to give him is a lot bigger than merely the figures as to what you are going to charge him.

Convince your customer that you are going to give him better results and the question of price will be largely eliminated.

You can do that best by interesting him in the things about the job which to you are little details but to him are matters of fundamental importance.

Tell him, for instance, about the

P & S SOCKETS

you are going to put into the job.



Explain to him why quality in sockets is essential—why it is desirable to use different types of sockets for different purposes—why pull sockets are better here—and key sockets better there—and pendant switches best for the other place.

You will find our little booklet, "The Gateway of Electric Service," a valuable help in doing this. Read it yourself—get familiar with the points it makes. Then have your customer read it.

That will help your business as well as ours.

Shall we send you a copy?

Pass & Seymour, Inc., Solvay, N.Y.





Is your Fan Stock Sold to you or for you?

It makes a big difference which—the difference between the satisfactory profits on fans which people ask for and the close margin on fans which require a lot of time and expensive sales effort before you can persuade customers to accept them.

The Robbins & Myers policy has always been to put more effort in helping the dealer sell fans than in selling fans to the dealer. It was this policy which, nearly a decade ago, led The Robbins & Myers Company to start an advertising campaign to the general public on Robbins & Myers Fans, before any other fan had been so advertised.

This policy was adopted, of course, with the belief that The Robbins & Myers Company would benefit to the same extent that electrical dealers would be benefitted by this advertising. The company believed that the more easily Robbins & Myers Fans sold, and

consequently the more money they made for dealers, the more dealers would want to handle them, the more surely they would stick to the R & M line year after year, and the less effort we would have to make to get dealers to carry R & M Fans.

It has worked out just that way. And Robbins & Myers Fan advertising has been carried on consistently year after year.

Today The Robbins & Myers Fan is known everywhere. The dealer doesn't have to waste time arguing R & M quality. The public knows The Robbins & Myers Fan is a quality fan—one backed by an absolute guarantee to give satisfaction.

The R & M line is made in the light-weight, handsome drawn steel construction in all sizes and types.



New York

Catalogues, price lists and information on the line of window displays, imprinted booklets, lantern slides and other helps we supply dealers will be sent on request.

The Robbins & Myers Co., Springfield, Ohio

Boston

Philadelphia

Chicago

St. Louis

Rochester

San Francisco

Cleveland



Cincinnati

Robbins & Myers Fans

A National Campaign to Woodworkers

A wide variety of woodworking plants are being approached this season by the General Electric Company through its trade paper advertising. The advertisements shown herewith are being run in full page sizes in the most prominent papers in the woodworking field. These advertisements bring out strongly the many advantages of G-E motor drive.

CO-OPERATION Between the Motor and the Driven Machine



The motor is an important part of the machine. You get the most out of your machine by spending a few dollars to get a G-E motor. The leading manufacturers will be glad to recommend the G-E motor equipment best suited to your machine. If you plan on a G-E motor, ask for it.

General Electric Company
Schenectady, N. Y.

You can place G-E Motors anywhere



This illustration shows two G-E motors driven in a wood-working shop. The glue pot is operated by a G-E motor on the ceiling and the edging machine is driven by a G-E motor on the floor.

In considering co-operation, have the motor and motor control made a part of the machine. You will find that progressive wood-working machine manufacturers are inclined to furnish G-E motors as a part of drive-driven combinations. Ask your manufacturer, your power company or our nearest office about G-E motors and motor control.

General Electric Company
Schenectady, N. Y.

A G-E MOTOR for Every Machine



This is the general principle of the G-E motor control system. The motor and control are made a part of the machine. The motor is mounted on the machine and the control is mounted on the ceiling. This system is simple and efficient. It is the only system that gives you the most out of your machine.

Ask your manufacturer, your power company or our nearest office about G-E motors and motor control.

General Electric Company
Schenectady, N. Y.

No Belts Here



The best saw is operated by a direct connected G-E motor. This method requires no belts. It saves what you can do to secure compactness, reliability and efficiency in your shop. Progressive machine manufacturers are well informed on G-E motors and control. You can also ask our nearest office, G-E motor agency or your power company for information concerning the electrical equipment best suited to your machine.

General Electric Company
Schenectady, N. Y.

Your Local Advertising

G-E motor agents can tie in with the G-E campaign by soliciting woodworking establishments in their local territories. There are few carpenter shops, however small, where there is not a need for at least one or two motor driven machines. The larger plants offer opportunities in greater proportion.

For assistance in newspaper advertising consult our Electrical Advertiser Service at Schenectady.

General Electric Company
Schenectady New York



"There It Is!"

No more fumbling in the dark for pull-socket chain or switch plate. The self-luminous

RADIEYE

pull-socket pendant or switch-plate attachment enables one to locate the exact spot for turning on the light, even from across the room.

These attachments contain an actual radium composition protected by glass. The luminosity is thus practically permanent. The body is made of brass with all standard finishes and can readily be attached to either pull-socket chain or switch-plate without the aid of tools.

G-E Reliable Wiring Devices are sold by distributors in all large cities.

General Electric Company

General Office: Schenectady, N. Y.



Sales offices in all large cities

6691

OHIO

Electric Cleaners

Unusual advantages to dealer and user

"Standard"

A light-weight, easily operated, conveniently designed, durably constructed cleaner for home use.

"Special"

A large and powerful household machine with fourteen-inch nozzle. For large houses and apartments where fast cleaning is required.

"Janitor"

A still more powerful machine — especially designed for extra-heavy duty. Adapted to service in large buildings, hotels, stores, etc.

It is rarely that the dealer has an opportunity to combine such ideal factors as an easy selling product, at good profit, with customer satisfaction assured. They are all evident in Ohio Electric Cleaners.

Ohio cleaners are **easy sellers** because they offer advantages to the purchaser not obtainable in other makes. One of the three types will exactly suit the customer's service.

Ohio cleaners are **profitable** because they are easy moving stock and we stand behind them. The margin of profit is good.

Ohio cleaners make **satisfied** customers because **they** make good or **we** do. They are made with an eye toward the **building up** of the electric cleaner business.

We know it is your desire to give your customers the best the market affords. Also, it is our desire to offer you the best that can be manufactured.

Our proposition will interest you. Get it.



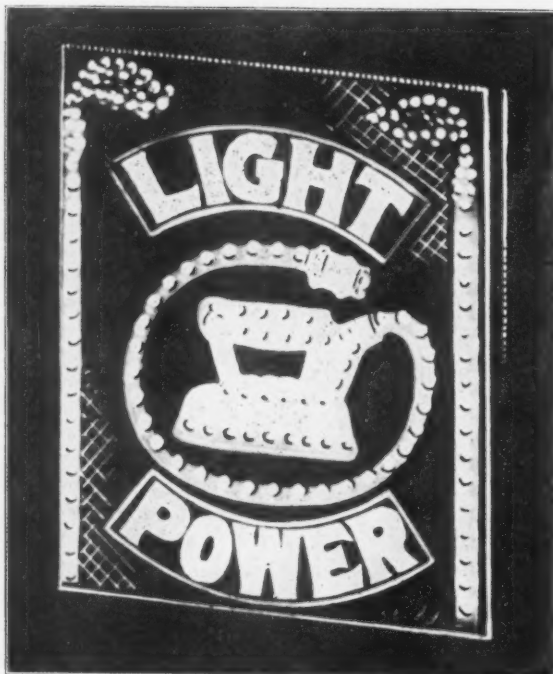
THE UNITED ELECTRIC COMPANY

The Wise-Harrold Electric Company—Department O.

CANTON, OHIO

We also manufacture and sell the famous Tuec Stationary Cleaners, more of which are installed than all other types combined

selling. your service



Installed by an alert Central Station Manager, this FEDERAL electric sign is daily proving its wonderful advertising value. We can produce something similarly effective for you.

Our staff of expert sign designers will create original designs for you, or work out the prospect's idea in practical form—and there is no obligation unless accepted.

Write for illustrated Special Bulletin No. 10, showing some recent FEDERAL sign installations by Central Stations. You will be interested. Write today.

FEDERAL SIGN SYSTEM (Electric)

Lake and Desplaines Sts.
CHICAGO

627-649 W. 43rd St.
NEW YORK

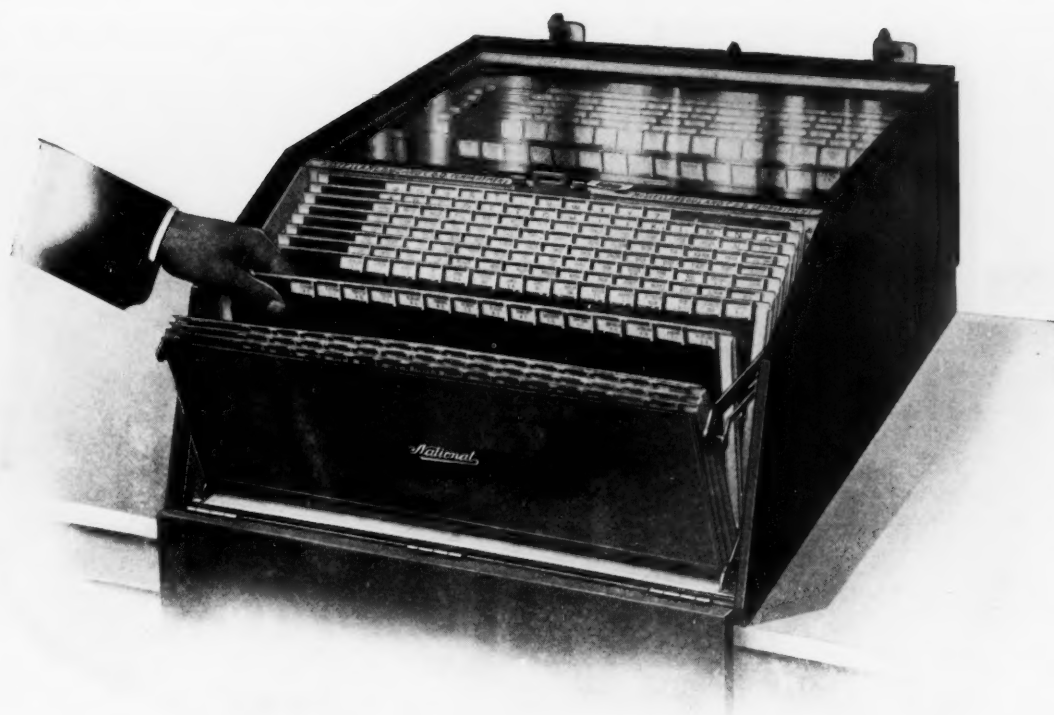
618 Mission St.
SAN FRANCISCO

Three Factories
Branches in all the large cities

THE quickest road to sales is through *demonstration*. You know that. If you have current for electric signs to sell—show an electric sign *in operation*. If you have light to sell—deliver your salestalk *in letters of light*. And demonstrate *right*—with the most original and effective signs—

with **FEDERAL**
electric signs

A FEDERAL electric sign not only brings the electric sign idea *home* to the merchants in your town; it also may be made to increase any branch of current sales you may intend—use of electric irons, in the instance illustrated.



A New N. C. R. Invention

*As important to you as your
telephone or cash register*

It's a new credit file that *safeguards* your credit business—in a better, easier, safer, quicker way than you thought possible.

It is so simple that anyone can operate it.

It is so speedy that all entries are made in the presence of the customer, who leaves with a statement of the purchase—plus a record of the balance carried forward.

It is so convenient that you can set it on any size counter, table or desk. The exact balance due from any customer is instantly available, and the file can be operated with one hand while the other holds the telephone receiver.

It is so complete that a true record of the whole credit business is always available in short order.

And this knowledge alone is worth more than the cost of the file.

It is so safe that records once filed in its locked compartment cannot be lost or destroyed. Records can be seen, but not tampered with.

A few weeks' use will pay for it.

There's nothing else like it, and it can be seen at the N C R office near you, or a letter to us will bring you complete information.

See this new file or find out how it will stop your losses, please your customers, and relieve you of work and worry. Use the coupon.

The
National
Cash
Register Co.
Dayton, Ohio

Please send full information about your new Credit File.

We have about.....
Charge and C. O. D. accounts

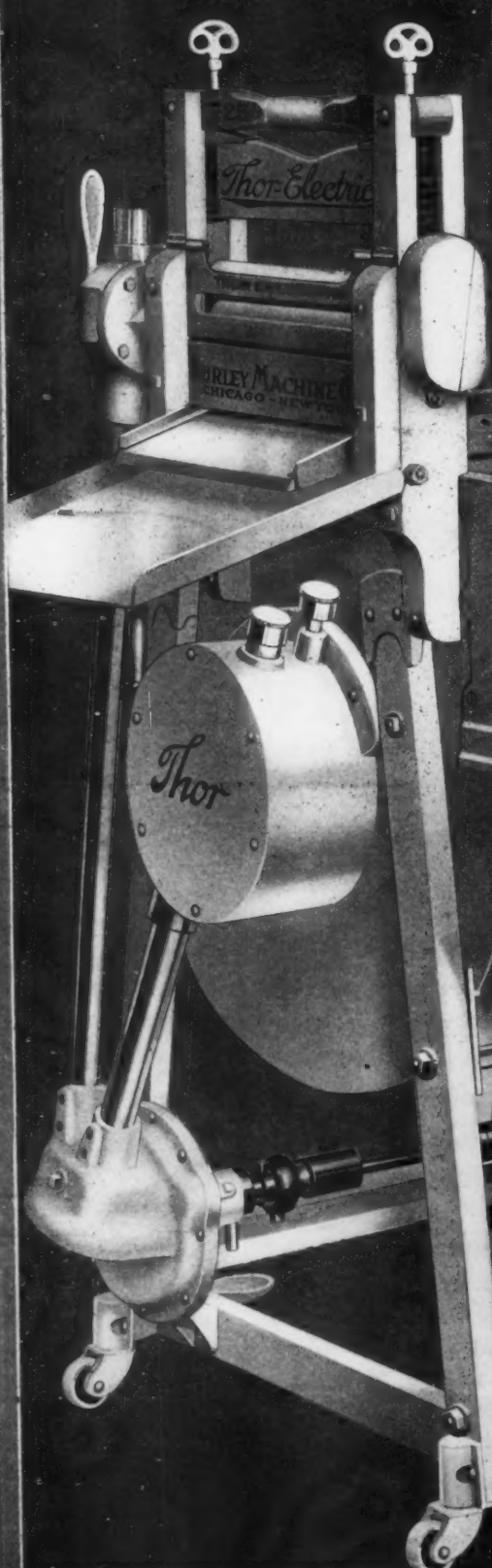
Name.....

Firm.....

Address.....

The National Cash Register Company
Dayton, Ohio

Electrical Merchandising



Thor WASHERS

have earned a reputation that you can capitalize upon to build *your* business.

When you sell a Thor you have served your customer in a manner that will bring lasting favor to you. You can depend upon Thor machines and Hurley Service.

HURLEY MACHINE CO.
143 W. 42nd St. 32 S. Clinton St.
NEW YORK CHICAGO



Thor

IRONERS

are following in the path of the famous Thor Washer. Where one goes the other must follow.

It is the next step in relieving wash day of its drudgery. Every washer owner is a prospect for the Thor Ironer. Let us help you make the sale.

HURLEY MACHINE CO.

143 W. 42nd St. 32 S. Clinton St.
NEW YORK CHICAGO

Take These Steps

Two 1917 Leaders

A frost bronze knuckle jointed Six Inch Fan
An adjustable-while-running Oscillating Fan

Western Electric
1917 FAN MERCHANDISING CONTEST
Information Blank

This may be submitted to any store but this blank is furnished for your convenience.
It is to be filled out and mailed on or before the Western Electric Company, Inc., prior to October 1st, 1917.

NAME AND ADDRESS OF CONTESTANT

1. WINDOW DISPLAY—Attach one photograph of your fan window—remember we pay one dollar for each photograph entered whether you win a prize or not.

2. METHODS USED IN HOUSE-TO-HOUSE CANVASSING

Get this Contest Information Blank

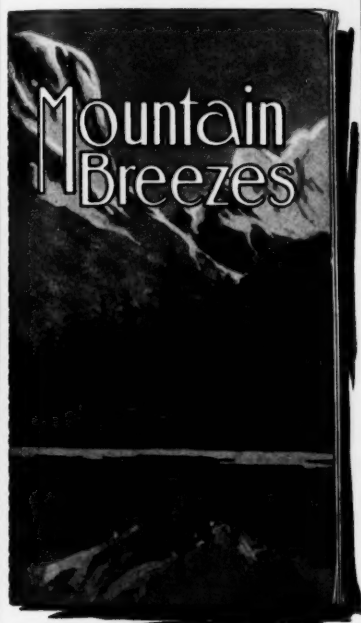


Use this two colored stuffer to
get fan prospects

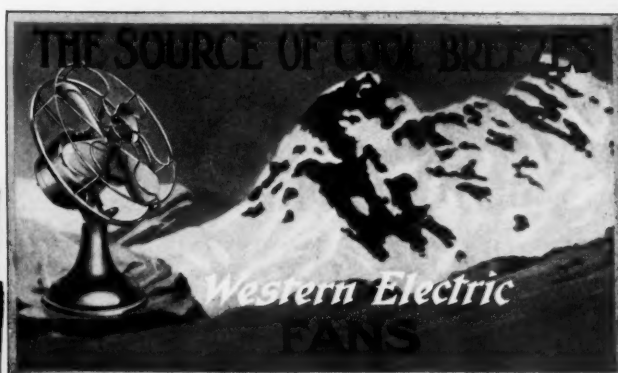


Run this and other ads in your
local newspaper to bring in fan
inquiries

for a Successful 1917 Fan Season



Use this attractive colored booklet as a "closer" for fan sales



Display this six color card in your window and on your counters and ledges



Use this and other slides in your local motion picture theatre

Prizes

\$100 for the best Campaign

\$50 for the next best

and five \$10 prizes

Date.....

Western Electric Company

Gentlemen:

Please send me merchandising blank and full information about Western Electric 1917 fan and sales helps.

Name.....

Address.....

SAVE TIME AND FREIGHT

Western Electric Company

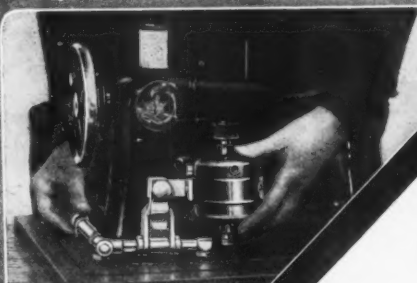
INCORPORATED

SAVE TIME AND FREIGHT

New York	Atlanta	Chicago	Kansas City	San Francisco
Buffalo	Richmond	Milwaukee	St. Louis	Oakland
Newark	Savannah	Indianapolis	Dallas	Los Angeles
Philadelphia	New Orleans	Detroit	Houston	Seattle
Boston	Birmingham	Cleveland	Oklahoma City	Portland
Pittsburgh	Cincinnati	Minneapolis	St. Paul	Omaha
			Denver	Salt Lake City

EQUIPMENT FOR EVERY ELECTRICAL NEED

QUICKLY ATTACHED



RUNS QUIETLY AND SMOOTHLY



Get
a Solid
Grip on the
Sewing Machine
Motor Trade

A rich market waiting—big sales possibilities—a motor that will sell and satisfy. Same price as other motors, but gives you a *bigger* profit. Send for a

DUMORE
SEWING
MACHINE MOTOR

and examine it thoroughly. None like it. Attaches quickly—stays rigidly in place—can't crawl away from hand wheel of the machine. Connects to any socket—six distinct foot-controlled speeds. Universal motor, operating on direct or alternating current. Fits any machine—motor drops with head.

30 Days Free Trial

We are selling the DUMORE on absolute merit. Send for one on approval. Bring it to the attention of your customers and if you're not satisfied with your sales in 30 days ship the motor back at our expense.

**WISCONSIN ELECTRIC
COMPANY**

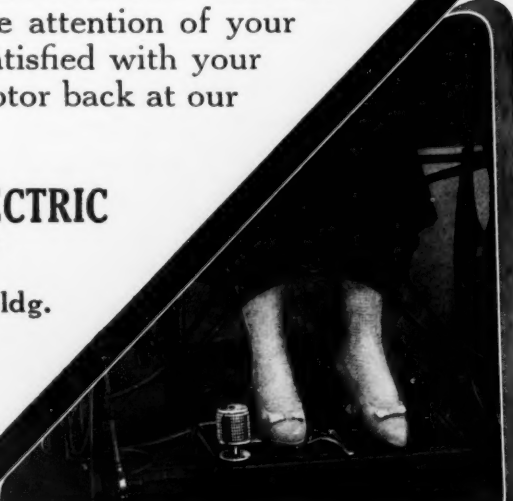
2600 Dumore Bldg.

RACINE,
WIS.

DROPS INTO CABINET



GIVES ANY DESIRED SPEED



Plan now a March campaign

**In March 1916 one central station
Sold \$15,000 worth of Hoovers
- another \$20,000.**



March and April are harvest times for the dealer in vacuum cleaners. Central stations who have taken advantage of this fact, and gone after the business in an organized manner, have made sales and profits almost unbelievably large.

One central station last March (and by the way they had just recently taken hold of the Hoover at that time) sold nearly 300 Hoovers—over \$15,000 worth of business, and over \$5000 gross profit on the right side of the ledger for the month.

The Hoover is the only machine on which you can hope to make the *most* of the opportunity in a March campaign. Here is the keynote of the situation in the words of The Denver Gas & Electric Light Co.

"Before selling your cleaner, we handled well-known makes of vacuum cleaners that sold at a much lower price, but we find that the Hoover is much easier to sell, owing to its wonderful cleaning efficiency and durability."

Let us tell you how to put on a March selling campaign. Let us tell you the methods that resulted in a sale of \$15,000 worth of Hoovers last March by one central station and \$17,000 by another.

—the methods that resulted in the sale of 52 Hoovers in a single month by one salesman, 39 by another, 32 by a third, and so on.

To get this valuable information requires only the mailing of the coupon. We'll send it immediately. You won't be obligated.

The Hoover Suction Sweeper Co.

Box 901 New Berlin, Ohio

The Hoover Suction Sweeper Co.

Box 901, New Berlin, Ohio

Gentlemen—Please send us full information as to how to conduct a special selling effort on Hoover along lines that have been used with great success by other central stations.

Name _____

Address in full _____

**THE
HOOVER
SUCTION SWEEPER**



Zip!

**It
Shoots
"Pep" Into
Your Lamp
Business.**

A dollar a year—
free to National
MAZDA Lamp
distributors.

IT'S "rough and ready"—entirely lacking in highbrow homilies. That's the very reason distributors of National Mazda Lamps have for four years and over found the **Stimulator** an invaluable aid in the building up of their lamp business. In the first issue of this monthly publication it was announced that the Stimulator would be "A clearing house of lamp sales experiences, data and methods; a disseminator of ideas of salesmen, by salesmen, for salesmen."

This definition is as true today as then. If you are one of the 20,000 readers of the National Mazda Stimulator you can doubtless point to times when it has contributed to your lamp merchandising success.

NATIONAL LAMP WORKS

OF GENERAL ELECTRIC CO.
NELA PARK CLEVELAND

Member Society for Electrical Development—
"Do It Electrically"





Profitable Selling Is Making the Customer Want What You Have to Sell

And the way to do that is to convince the customer first that you realize and understand his necessities and desires thoroughly, and second make him understand that your goods will fill his requirements to the best possible advantage.

You can't do that without fully explaining

the goods, their functions and their qualities.

And no point that will help in doing this is too small to be ignored.

Little things make big impressions. There are endless opportunities for you to make just such effective selling impressions by telling your trade about

P & S Sockets and Wiring Devices



Explain how important it is to have good sockets. How and why sockets are "the gateway of electric service." Show *why* a pull chain socket may be most desirable for certain points where current is used intermittently and *should* be turned off when not in use.

That sort of salesmanship increases the confidence of your customer in you, enables you to standardize your stocks and decrease your capital investment.

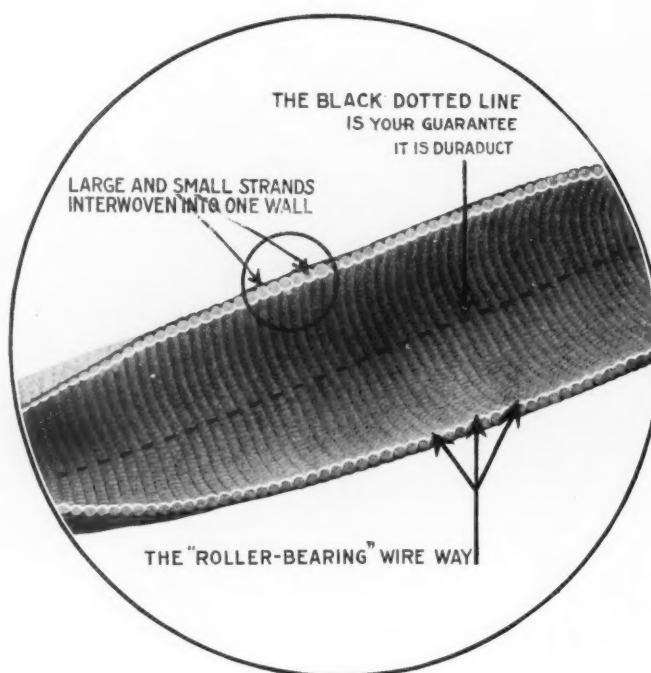
That means more profit.

Our little booklet "The Gateway of Electric Service" will furnish you a lot of food for thought in this connection. Ask for a copy.

Pass & Seymour, Inc.

-

Solvay, N. Y.



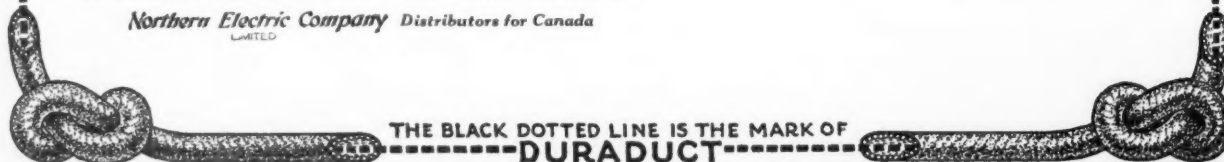
A few reasons for the popularity of **DURADUCT**

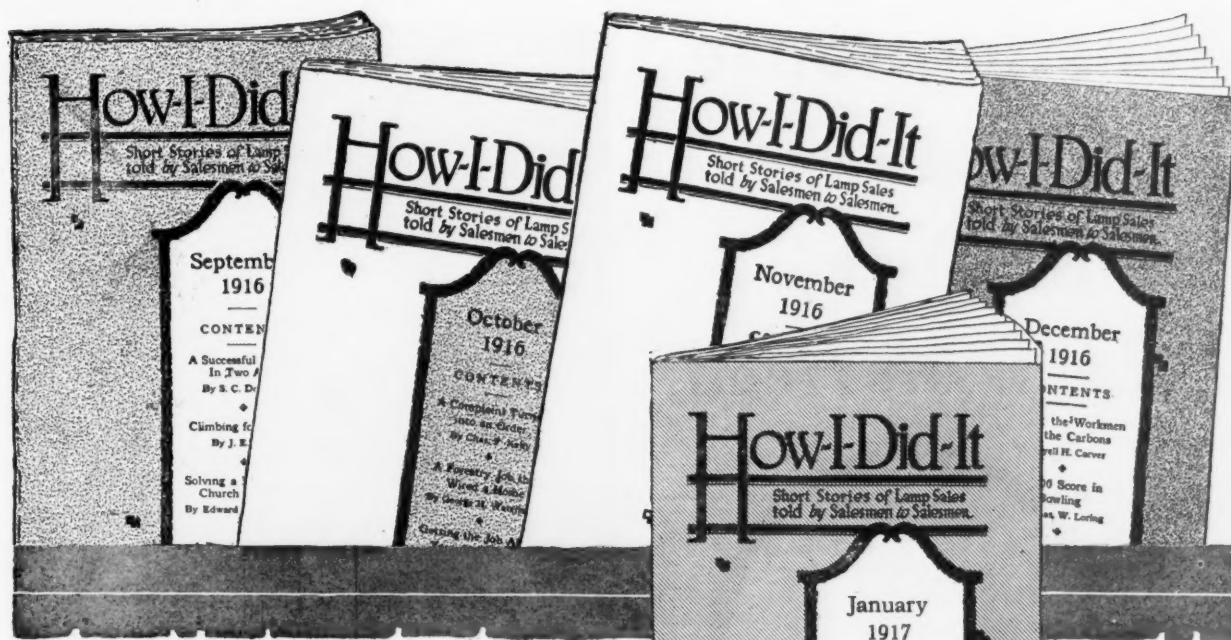
(Reg. U. S. Patent Office)

The special construction shows its value.
The single wall prevents the blistering inherent in multiple wall types of conduit.
The "Roller-Bearing" wireway makes fishing easy.
The black dotted line identifies it.
All good jobbers sell Duraduct.

TUBULAR WOVEN FABRIC COMPANY
MANUFACTURERS — PAWTUCKET, R. I.
GENERAL SALES AGENT — A. HALL BERRY
97 WARREN ST. NEW YORK — 950 CLINTON ST. CHICAGO.

Northern Electric Company Distributors for Canada
LIMITED





An Invaluable Library for Managers and Salesmen

Twenty-five successful salesmen from different sections of the country have written stories of their selling experiences for you to read.

These stories have appeared in "How-I-Did-It," which is free to you and to every member of your selling force.

They are stories of master selling strokes, not theoretical articles, but the personal experiences of real live salesmen.

If you have not received all five numbers already published—September, October, November, December and January—send today for the back numbers to complete your set.

We'll be glad to send any or all of the back numbers until our supply is exhausted.

Be sure and get your name on the "How-I-Did-It" list. It costs you nothing and will give you invaluable selling ideas each month.

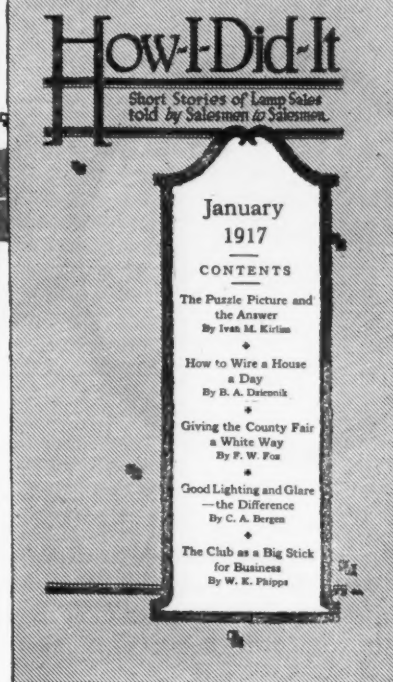
Guaranteed by the Name

Westinghouse Lamp Co.

Atlanta	Cleveland	Los Angeles	Portland
Baltimore	Columbus	Milwaukee	St. Louis
Boston	*Dallas	New Orleans	Salt Lake City
Buffalo	Denver	New York	San Francisco
Chicago	Detroit	Philadelphia	Seattle
Cincinnati	Kansas City	Pittsburgh	Syracuse

*Westinghouse Lamp Corporation.

Export Sales Dept., 165 Broadway, N. Y. C.
or Canada—Canadian Westinghouse Co., Limited, Hamilton, Ont.



Advertising
Department
**Westinghouse
Lamp Co.**
165 Broadway, New York

Please send all the back numbers of HOW-I-DID-IT and the rules governing contribution of stories.

To Mr.

Position

Company

Address

Westinghouse Sew- Motors *Folds With Head*



How much easier it is to sell the Westinghouse "Sew-Motor" because the modern drop-head sewing machine will fold up with the "Sew-Motor" on the machine. The "Sew-Motor" is permanently attached to the machine head, and need never be removed.

With the "Sew-Motor" comes the most complete merchandising plan ever presented upon a sewing machine motor. Have you received your copy? If not, send for it now.

Westinghouse Electric & Manufacturing
Company

East Pittsburgh, Pa.



Ten Big Selling Points

- "Sew-Motor" folds up with head of machine.
- Operator sits in natural position facing needle with foot on treadle.
- Positive belt drive—no cork pulleys to be replaced.
- Speed regulator out of way, permanently attached to machine.
- Speed regulator gives any speed from zero to 800 stitches per minute.
- Motor out of way when operating, leaving right hand side of machine-table clear.
- Motor quiet in operation.
- Absolutely clean. Lubricated with grease cups, no danger of oil running out on work.
- Motor permanently attached to machine. Does not depend on its weight alone to hold it in place, no danger of its slipping out of place.
- Comprehensive Dealers' helps and service.

Westinghouse



No. E946. Toaster,
Price \$4.50



No. E940. Chafing Dish,
Price \$16.50



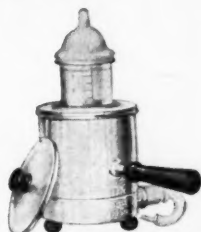
No. 9635. Coffee Per-
colator, Price \$8.50



No. E9940. Heating
Pad, Price \$7.50



No. 904. Tea Ball
Tea Pot, Price \$8.50



No. E9930. Milk
Warmer, Price \$7.50



No. E981. Rectangular Grill,
Price \$5.50



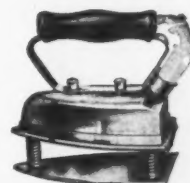
No. E9684. Portable Electric Double Range,
Price \$20.00



No. E9166.
Coffee Urn,
Price \$16.00



No. E998. Disc Stove,
Price \$6.50



No. E905. Electric
Iron, Price \$4.50



No. 984. 4-Heat Grill,
Price \$6.50

UNIVERSAL

Waiting to Be Placed in Some Modern Home

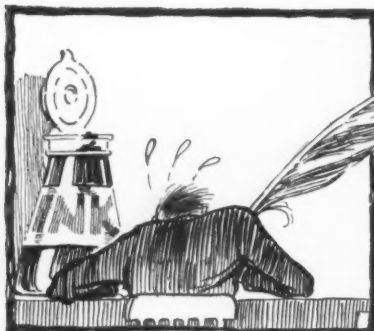
There is not a home in this country available to electricity that could not use to advantage some form of electrical cooking or heating device.

UNIVERSAL Electric Home Needs

After the sale is made the essential thing for the life of your future business is to sell the appliances which you feel sure will be kept in continual service and will live up to the promises you have made in regard to them.

Universal Electric Home Needs will stand up under years of constant use and are especially valuable because of the many exclusive conveniences which they include.

LANDERS, FRARY & CLARK
NEW BRITAIN,
CONN.



Bingles from the B.M.'s Bat

A page for readers and advertisers edited, and mostly written, by the Business Manager....

Recently the assistant advertising manager of Armour & Company made substantially the following statement:

"Tests have developed the fact that only 10 per cent. of orders given to dealers over the 'phone are nationally advertised goods and that only 35 per cent. of sales over the counter are for nationally advertised or trademarked goods, consequently we have to depend upon dealer influence for 55 per cent. of the sales of Armour products."

Yea, verily!

When general statements are reduced to figures they sound convincing.

We venture to suggest that when these figures are known and when others are produced, "Side-stepping the Dealer" will cease to be a popular indoor sport.



Profitable Sellers at all Times

Steady, sure sales that bring the customers back into your store again and again, are what you are looking for. You want repeat sales with a good profit! Then you should stock

Franco Flashlights

and Radio Batteries. They have a number of exclusive talking points to be found in no other flashlight on the market to-day.

Profits are big and our liberal guarantee of absolute satisfaction protects you and your customer. Send for catalog and price list to-day.

INTERSTATE ELECTRIC NOVELTY CO.

104-114 South 4th Street, Brooklyn, N. Y.

Chicago

San Francisco

Toronto

UNCLE SAM
Chooses
the **NEW LIBERTY**
CLEANER for
U. S. Post Office
Service



One Lighting Co.
Sells 800
in One Month—
A New
Record



The **NEW LIBERTY** **CLEANER**

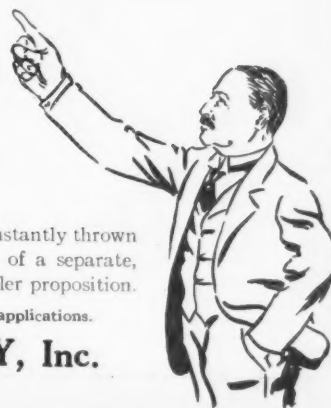
Handsome, efficient, durable. Many exclusive features. The only cleaner with an inside nozzle brush which can be instantly thrown into action by a touch of the foot. It eliminates handling of a separate, dirty and unsanitary brush. **Get in line**—write NOW for liberal dealer proposition.

Made for us by the General Electric Co., under the Kenney patents and our patent applications.

INNOVATION ELECTRIC COMPANY, Inc.

585-589 HUDSON STREET, NEW YORK

Awarded gold and silver medals at Panama-Pacific Exposition.



HUGHES

ELECTRIC RANGES

have achieved their overwhelming predominancy in a short period of six and one half years.

From one small room in August, 1910, to the mammoth factory shown below is part of the record which has stamped Hughes the Master Range Builder of the World.



HUGHES ELECTRIC HEATING CO.

Taylor Street and Waller Ave.

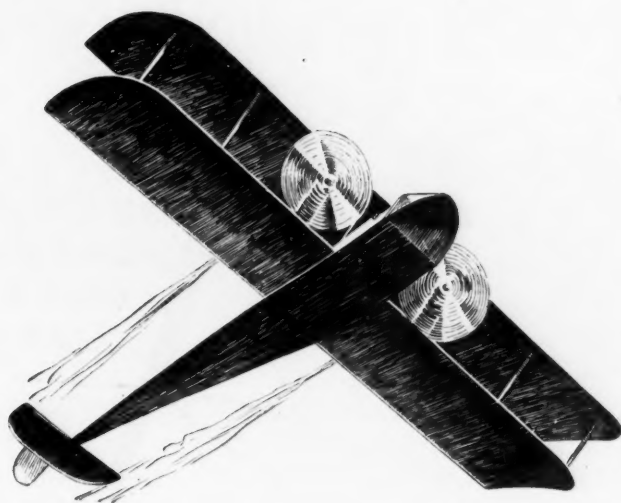
(After March First)

CHICAGO

Toronto

Winnipeg

Boston



ALL of the business for aeroplane service in this country would not be worth as much to you—in profit—as one good building contract.

But it is important to you and all your customers to know that standard ECCO wire is recognized as dependable in mid-air.

Aeroplane service is but one of the exacting requirements which ECCO Wire must meet.

Having fully demonstrated the dependability of ECCO quality, we are advertising the fact to the whole public, so that your customers can know and recognize ECCO quality.

That gives you your chance to cash in on this high grade material—at fair prices. By using ECCO you can demonstrate quality, and make “quality”—rather than “cut price”—the key-note of every job.

ECCO Dependable Insulated **WIRE**

ELECTRIC CABLE COMPANY

*Makers of ECCO wire for every purpose
where rubber covered wire is used.*

10 East 43d Street

New York

You, Too, Can Build Big Cleaner Sales With the Popular

Apex



**Last October
Alone This
COMPANY
Sold**

THE COLUMBUS RAILWAY, POWER & LIGHT COMPANY
102 NORTH THIRD STREET
COLUMBUS OHIO
Feb. 1, 1917.



Apex Electrical Mfg. Co.,
1111 Tower Ave.,
Cleveland, Ohio.

Dear Sirs:-

Our Apex Electric Cleaner campaign of last October was very successful. We sold a total of 625 cleaners during the month together with 591 sets of attachments. The above results were accomplished by our twelve solicitors together with the aid of a very comprehensive plan of advertising, and in this regard we wish to express our appreciation for the valuable assistance given us by your Advertising Department.

We have sold the Apex Cleaner in Columbus for the past three years and our increasing sales are the result of the quality of the cleaner itself together with the very efficient "service" furnished us by your factory.

We anticipate the sale of Apex Cleaners for the year of 1917 to surpass all of our previous records and are at this time arranging a campaign for the early spring.

Yours very truly,
W. A. M. M.
THE COLUMBUS RAILWAY, POWER & LIGHT CO.



The WAY to START

Write for our catalog—get our Sales Guide—see the various new sales helps we've prepared for spring—new folders, newspaper electros, window trims, etc., actual tangible forms of sales co-operation. We show you HOW TO GO AFTER business—you don't have to wait for it to come to you!

If you're "alive" and progressive—whether dealer, contractor or central station—our APEX proposition is of vital PROFIT interest to you!

Write us to-day! "There's an Apex Jobber in your territory!"

**The YEAR'S
BEST
Selling Season
is Just Ahead**

1916 OCTOBER 1916						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

March and April, even into May, are "clean-up" months in homes, municipalities and in vacuum cleaner selling. Each year the utility of the broom is more pronounced; each season the necessity of a vacuum cleaner more evident—get in line NOW—find out about the APEX—the Best of them ALL!

The APEX Electrical Mfg. Co.
Cleveland, Ohio

Here's a Really Useful Wiring Handbook

Croft's

Wiring for Light and Power

(READY EARLY IN MARCH)

By **Terrell Croft**, Author "American Electricians' Handbook" and "Wiring of Finished Buildings."

400 pages, flexible leather, pocket size, \$2.00 net, postpaid.

Both the experienced wireman and the beginner will find this book valuable.

Every man who has ever had, or ever expects to have, anything to do with wiring or installation should own a copy.

To those who know Terrell Croft's "American Electricians' Handbook," or his "Wiring of Finished Buildings," or any of his technical writings, little need be said about this book.

There was need of such a book. Every wireman has felt it.

There was a demand for a book that would enable the experienced and inexperienced wireman to meet the requirements of the National Electrical Code, and at the same time, by logical arrangement and thorough indexing, tell you quickly what the Code requires and *why* wiring should be done in a given way.

The book is a big one. There are over 400 pages, bound in flexible, durable binding, pocket size.

Without hesitation or reservation, we announce that this is a **real Wiring Handbook**.

We Guarantee This Statement

We do not ask you to buy the book or to agree to buy it until you have examined it fully. You are under no obligation to buy it until you are satisfied that it will be of value to you.

You must be satisfied.

Fill out and mail the coupon today.

McGraw-Hill Book Co., Inc.
239 WEST 39TH STREET, NEW YORK

LONDON: HILL PUBLISHING CO., LTD.
6 & 8 BOUVERIE ST., E.C.

Publishers of Books for Electrical Merchandising.

Sent on Approval

No Money
Down



A Wiring Handbook

That fits the requirements of the National Code.

That conforms to the best American practice.

That is indexed so that you can find instantly the facts you need.

That is plainly worded, so that anyone who can read English can understand it.

That is fully illustrated, so that the right way to do a job can be grasped promptly.

That is, besides, a common-sense, practical commentary on the National Electrical Code.

That tells how to install wiring and apparatus for practically all services, under practically all conditions.

That tells how to install these so as to be electrically safe and mechanically correct.

That explains why installations should be made in a given way.

FREE EXAMINATION COUPON

McGraw-Hill Book Co., Inc.,
239 West 39th Street, New York, N. Y.

You may send me on 10 days' approval:

Croft—Wiring for Light and Power, \$2.00 net.

I agree to pay for the book or return it postpaid within 10 days of receipt.

If a regular subscriber to Electrical Merchandising, check here ☐

(Signed)

(Address)

Reference E.M.-Feb.

(Not required of subscribers to Electrical Merchandising. Books sent on approval to retail customers in the U. S. and Canada only.)

CORA

"Double Efficiency"

UNIT

A Real Unit—
and a proven big seller

Not made up of two odd pieces. Reflector and Bowl are both of Cora Glass, both of Gothic design—perfectly matched. Combines beauty and efficiency.

The Cora Double Efficiency Unit has been a big seller from the very start. It is now a proven seller for you. Write for prices.



No. 1643 1/2 "Double Efficiency"
No. 1639 1/2—11" Reflector with 6 1/2"
Bowl
No. 1641 1/2—13" Reflector with 8"
Bowl
No. 1643 1/2—17" Reflector with 10"
Bowl

Consolidated Lamp & Glass Co., Coraopolis, Pa.

NEW YORK, N. Y.
66 West Broadway.
CHICAGO, ILL.
17 No. Wabash Ave.

PHILADELPHIA, PA.
634 Arch Street.
CINCINNATI, OHIO.
141 East 4th Street.

BOSTON, MASS.
164 Federal Street.
PITTSBURGH, PA.
702 2d Nat. Bk. Bldg.

BUFFALO, N. Y.
525 Main Street.
PORTLAND, ORE.
233 Sherlock Bldg.

HAMILTON, ONT.
62 King Street East.
LOS ANGELES, CAL.
347 Pacific Elec. Bldg.

4 Examples of our News- paper Cut Service—

part of our Dealer Helps



We're not satisfied with offering our dealers the best possible vacuum cleaner (awarded Grand Prize at Panama-Pacific International Exposition, San Francisco), we aim to give dealers who sell

The EUREKA

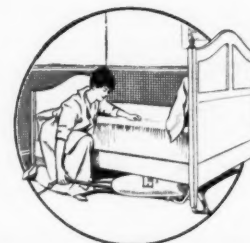
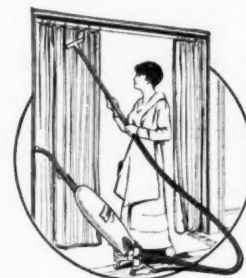
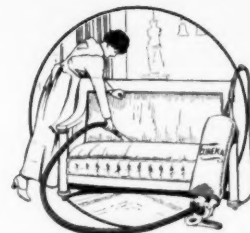
VACUUM CLEANER

the best, most effective, dealer helps, too. Our enthusiastic customers say we are succeeding. Let us add our proposition to your income-getters.

Eureka Vacuum Cleaner Co.

Detroit, Mich.

Licensed under Kenney Patent No. 847947



“Lighting Journal” Merges with McGraw Electrical Publications!



BEGINNING with the March issue the “Lighting Journal,” hitherto published by Norman Macbeth (Lighting Journal Company), will be merged with the electrical publications of the McGraw Publishing Company Inc.—Electrical World and Electrical Merchandising. Mr. Macbeth will be associated with the McGraw Publishing Company Inc., as a specialist in lighting problems to extend the service of Electrical World and Electrical Merchandising in their respective fields of the lighting industry to both readers and advertisers.

*In an editorial in the “Lighting Journal”
Mr. Macbeth states:*

"The Purposes of the Merger Are as Follows:

"The Lighting Journal was planned to present articles by writers from their experience telling not only 'why' installations were made to meet a particular situation, but also the important 'how'; to furnish that information to the man-in-between, the man who was depended upon by the consumer to bring him the best product of the manufacturer.

"It has constantly been our policy to devote attention to applied engineering and the commercial phases of the subject. It is in following through on this plan that we announce a change in ownership of the Lighting Journal from the Lighting Journal Company to the McGraw Publishing Company Inc. This action we feel is along the logical lines that you cannot stand still but must go ahead or recede. This move is, frankly then, one of going ahead. The engineering matter which the Lighting Journal has handled will find an excellent place and a broader circulation in the columns of the Electrical World, as, likewise, will the commercial matter that is of direct interest to the salesman be given a greater, more productive distribution among subscribers of Electrical Merchandising, the electrical business man's monthly trade paper."



The Development of An Editorial Plan

IN purchasing the Lighting Journal and combining its various features with the McGraw electrical publications the McGraw Publishing Company Inc., is carrying out the editorial plan of Electrical World and Electrical Merchandising. Electrical World has long recorded the science and art of illumination and

the commercial lighting practice of the central station and engineering branches of the industry. Electrical Merchandising has presented particularly the methods and plans for selling lamps, fixtures and accessories. It has specialized on the commercial problems of the dealer and contractor, the fixture manufacturers and their salesmen.



What the Change Means to Electrical World

ELECTRICAL WORLD is read by the men who make opinion in the industry in the scientific, engineering, central station, manufacturing and business fields. Electrical World will continue to record the development of the art of illumination and the commercial applications of lighting. In special articles and editorials; in the new department, Central Station Service, and in the departments Technical Advance in Theory and Practice, Review of Trade and Industry and Patents, the Electrical World will continue to present the running history of lighting development.



New Features in Electrical Merchandising

ELECTRICAL MERCHANDISING will contain a special department, "Lighting Sales and Methods," which is planned particularly for the lighting salesman, the dealer in lighting fixtures and accessories, the contractor and the fixture manufacturer. This department will summarize the experiences of men in these branches and will tell "how to sell" lamps, fixtures and accessories. In this department all advances in illuminating engineering will be interpreted for the immediate use of the fixture manufacturer, the dealer and the contractor.

Allocating the Buyers of Lighting Products

THE merging of Lighting Journal with Electrical World and Electrical Merchandising locates the buyers and specifiers of lighting equipment in two well defined fields. Thus they can be appealed to by properly directed copy at the minimum expense and practically without waste.

Electrical World is read by electrical engineers in central stations, industrial plants and factories, by consulting electrical engineers, by illuminating engineers, by the management and operating heads of central stations, and by the big men in the jobbing and engineering contracting fields.

Electrical Merchandising is read by electrical dealers and fixture manufacturers, by central station sales departments, by contractors, by jobbers and their salesmen and by all other men interested in the "sales method" of selling.

The allocation of these two great classes of buyers and recommenders of lamps, fixtures, illuminating glassware and the many important contributory products needful to the rapid and thorough development of the market for illumination, is a distinct service to advertisers. It simplifies the planning of sales campaigns; it reduces the investment in advertising and sales promotion; finally, it increases the efficiency of every dollar of money and hour of time devoted to business-building. The market is definitely mapped and adequately covered by only two journals—one engineering, executive and scientific, the other constructive, practical and commercial.

The facilities and prestige which these two journals have developed and maintain are now at the service of all manufacturers of lighting products and accessories.



McGraw Publishing Co Inc.

239 West 39th Street, New York, N. Y.



FARIES ADJUSTABLE BRACKETS

put the light on the work—not the workman

Show your industrial customers—and prospects—how simple it is to spot light every job with Faries Adjustable Brackets.

Thousands of them are in daily use, saving eyes and increasing efficiency. Faries Fixtures are easy to sell—simply show them.

Have you
received
catalog
No. 24?



FARIES MFG. CO.

Decatur, Ill.

"BRIGHTEST LIGHT
LONGEST LIFE"

NOVO BATTERIES

FOR ALL FLASHLIGHTS

Bullseye No. 2

RECUPERATION

Novo Batteries recover an unusually large percentage of consumed energy; they will help you regain many customers who became dissatisfied with batteries that corrode or lose energy.

Novo Batteries are Guaranteed
Not to Corrode or Leak.

It will pay you to handle NOVO. Write now for our
Catalogue and Discount Sheet.

•NOVO MANUFACTURING CO.
424-438 West 33rd Street
•NEW YORK•



The Reflectors of Utility and Value!



Holder Socket, Dome Type
Abolite

ABOLITES

The porcelain-enameled reflectors that make good with users, engineers and architects, contractors and jobbers

Abolites always lead for best and uniform results. Low maintenance cost for both lamps and reflectors.

The Abolite line is complete and of A-B make throughout. Each unit possesses all desirable characteristics in the best proportionate degree.

And now Abolites are porcelain enameled in our own new vitreous enameling plant. Our increased facilities mean better product and service.

Have you a copy of Catalogue 137-A?



Shade Holder, Dome Type
Abolite



Holder Socket, Bowl Type
Abolite



Holder Socket,
Diagonal Type
Abolite

The Adams-Bagnall Electric Co., Cleveland, Ohio

Manufacturers of
Electrical Apparatus with both
Merchandising and Engineering Merit

Industrial, Commercial and Street Lighting Equipment;
Distributing Power and Constant-Current Transformers;
Gyrofans; Oscillating Fans; Auto Electrical Accessories

Write now for data or quotation on your requirements!

This Letter is coming to you



It contains a
sales proposition of
interest to every
Electrical Dealer

7 in 1 Commutator Cleaner

SEVEN IN ONE Commutator Cleaner and Resurfacer has been adopted as Standard in hundreds of plants. Every user of motors or generators needs it. The letter tells you all about it. Read the letter carefully—it means profit to you.

DYNO UTILITIES MFG. CO., INC.
608 South Dearborn St., Chicago

Study This Cleaner Point by Point

You'll find that it has every feature that appeals to the housekeeper. It's the kind of cleaner that sells on sight.

The price is right, too—\$21.00 and good profit for the dealer.



- 1 Extra long nozzle (fourteen inches).
- 2 Revolving brush to take up ravelings, thread, hair, etc.
- 3 Four large rubber rollers for easy movement.
- 4 Large air chamber.
- 5 High grade universal motor, good for either alternating or direct current circuits.
- 6 Large opening to receive dirt.
- 7 Case made of aluminum, light and strong.
- 8 Dust bag has large capacity and is easy to empty.

The Pittsburgh "FA"

is the big cleaner value of the day and it's the big seller. It gives satisfaction and brings you new customers. It's just one of the Pittsburgh line of fast selling electrical specialties that you should handle. Send to-day for catalog of the complete line.

Pittsburgh Electric Specialties Co.

Pittsburgh, Pa.

Talk to the Women.



When every housewife in your town *understands* why Mazda Lamps are best, and how much more convenient it is to *buy them by the box*—then every home will be a profitable lamp account.

Tell this story to these women day by day and sell them

FRANKLIN Mazda Lamps

Franklin Advertising will help you reach out to the homes you have not met. Franklin Service guarantees that you will satisfy them. The Lamp itself will make friends of these customers and keep your profits growing.

Don't think that "Lamps are just lamps." There is more to it than that. Write today and see just what we mean.

The Franklin Electric Mfg. Co.

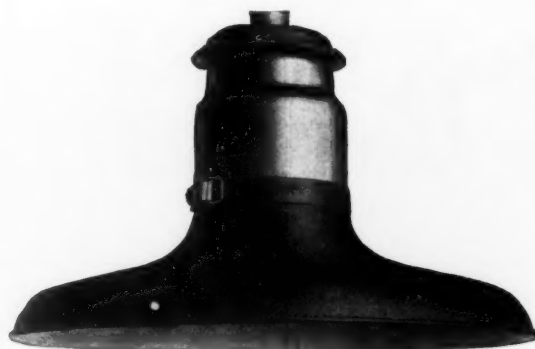
Hartford, Conn.

Remember—
The Name of Franklin
Helps You Sell.....



Whether you aim for high reflector efficiency or con- tracting economy

you win *both ways* when you handle "BURR" UNITS. No matter what the installation requirements, you can assemble from the 20 types of BURR devices the precise reflector needed.



"BURR" UNITS "fill the bill"

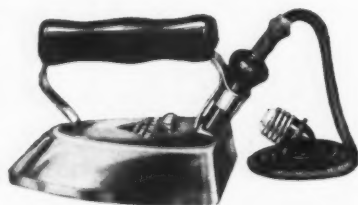
from every standpoint—efficiency, wiring economy, fineness of finish and durability. "BURR" UNITS are building bank accounts and good will for hundreds of contractors, dealers and jobbers. GET POSTED.

The Burr Mfg. Co. The A. B. Wilson Co.

Central Sales Agents
Cleveland, Ohio Leader-News Bldg., Cleveland
New York Office and Stock, 114 Liberty Street
Chicago Office and Stock, 618 W. Jackson Blvd.

Strong Profit Points

of the



"American Beauty Iron"

THE BEST IRON MADE

Its easy selling qualities—made possible by its superior mechanical construction, its pleasing and attractive appearance and the fact of its being universally known as the "Best Iron Made"—tend to make for quick stock turning and quick stock turning is the source of quick profits. Certainly this interests you? Let us tell you about them and put you on

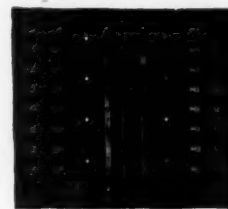
The road to more profit

We make a varied line of electric household and industrial devices. May we send you an illustrated price list and discounts?

American Electrical Heater Company
Detroit, U. S. A.

Oldest and Largest Makers in the World

Circle "T"



For Push Switches

Standard Panels

(For N. E. C. and plug fuses. Knife snap or push switches.)

If contractors would only consult our *STANDARD PANEL* lists they would find many opportunities to eliminate Special Boards.

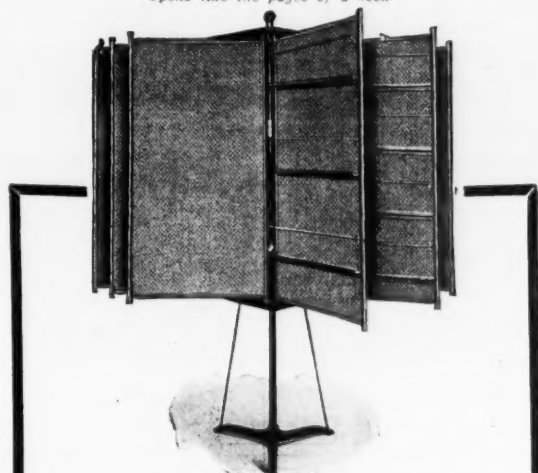
Special Panels take longer to build—cost more and are no better than STANDARD TYPES.

Through feed panels can be eliminated by tapping off the mains to the Terminal lugs of a STANDARD PANEL.

Consult our Standard Panels and Cabinets, pages 94-155, catalog No. 10.

The Trumbull Electric Mfg. Co.
Plainville, Conn.

"Opens like the pages of a book"



"It didn't take more than five minutes for me to select that lamp switch you wanted," said Mr. Busyman to his wife. "I went into Brown's and they were busy. I thought I was in for a long wait, but I noticed they had a complete line of switches displayed on a new

Universal Wing Displayer

"I just looked over their various styles, told the clerk the number I wanted, and I was through in less than five minutes. While turning the wings (they work like the pages of a book), I noticed they had a full line of sockets, just what we've always been forgetting, and I brought a few with me. It's great when you don't have to lose time being waited on—me for Brown's when I'm in a hurry—and at all other times. I can see what they have to sell easily, and I save time, too."

You, too, can please your customers with a Universal. Write for details of this wonderful display increaser.

UNIVERSAL FIXTURE CORPORATION
129 W. 23rd St., New York



Dress Up Your Windows

with our specially selected

Novelty Papers

(Not Crepe Paper)

Suitable for Backgrounds, and
General Display Work.

Most Complete Line Available

Changeable Insert Screens, Knock-down Pedestals, Flower Baskets, Artificial Flowers, Scenic Paintings, Chenille Roping, Beaver Board, Birds, Parrots, etc.

NOTE! This is our first advertisement in this magazine. It will pay you to get acquainted with us. Send for our samples.

Mention ELECTRICAL MERCHANDISING and a pair of our BIRDS OF HAPPINESS will be sent free.

Dept. K.

Doty & Scrimgeour Sales Co., Inc.
74 Duane Street New York

DENZAR



The Unit of Day Brightness

The DENZAR enables you to use to the best advantage every ray of light from the type "C" lamp.

It is constructed so as to remove all irritating glare.

Gives you the greatest amount of light in exactly the right intensity on the working plane.

No solid reflectors or supporting rods to cast unsightly shadows.

Being an enclosed unit there are no large available openings for dirt, insects and foreign matter to enter, causing ugly spots on the bowl.

All surfaces are highly polished so as to be dust-resisting, making the Denzar as easy to clean as a bare lamp.

The Denzar Bowl is made of one piece of glass, the upper half of which is of clear glass.

This bowl in combination with the opal reflector allows no absorption or waste of light.

Dealers and Central Stations. Let us tell you more about the Denzar. The selling possibilities in your territory are great.

Beardslee Chandelier Mfg. Co.

222 South Jefferson Street
Chicago, Ill.

BRASCOLITE

DIFFUSION PLUS REFLECTION



The Nationally Advertised Lighting Fixture

There is an unusual opportunity for the electrical dealer and contractor to associate his store with the national campaign which is making the Brascolite an article of daily demand.

There is a liberal margin of profit. The fixture comes to the dealer a complete unit in cartons. There is no assembling or wiring to be done. It is easily and quickly hung. A letter to us or your jobber will get you full information.

Luminous Unit Co. St. Louis, Mo.

NEW YORK
30 Church St.

BOSTON
223 Old South Bldg.

SAN FRANCISCO
639 Market St.

CHICAGO
19 S. Fifth Ave.
PHILADELPHIA
1020 Land Title Bldg.

"UNION" ELECTRICAL PROTECTING MATERIAL

A Good Fuse is like Reliable Insurance, not an Expense but an Investment, and proves itself so in time of need by giving the protection paid for.



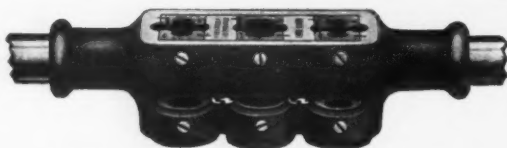
"Union" Fuses are made to safely carry their specified load but to promptly and safely open the circuit when the prescribed overload is reached. Opening on less current would be a needless expense to the user, and requiring more would rob him of the protection that he has a right to expect for his apparatus.

Write for Catalog No. 28

CHICAGO FUSE MFG. CO.

CHICAGO NEW YORK

For Conduit Threading



The TRIO Die Stock

Save your time and patience by having all your dies in *one* stock. No loose dies or parts to hunt up and assemble.

The TRIO contains three cutting sizes of Little Giant pipe dies all adjusted ready to use.



Greenfield Tap and Die Corporation

Greenfield, Mass.

New York Chicago
Galt, Ont., Canada



Send for No. 37 Catalog
of Screw Cutting Tools

If You Frost or Etch Lamps Without



*you are wasting time and money—
Order a trial can today—or write
for information.*

In 5 lb. and 10 lb. containers.

Union Electric Company

Sole selling agents for United States
Terminal Warehouses PITTSBURGH, PA.

SEARCHLIGHT SECTION

3 CENTS A WORD
Minimum charge 50 cts an insertion
for undisplayed cards of
men looking for work

5 CENTS A WORD
Minimum \$1.50 an insertion
for other undisplayed
cards set solid

5 DOLLARS
an inch for
display ads

Read This BEFORE You Write

In a new book of 176 pages on "Selling Your Services," there is a large amount of good advice—some of it worth many times the price of the book—including the following:

"The average letter of application starts with a few inane remarks, continues with a few sentences covering the applicant's education and experience, and ends up by crediting the author with a few general qualities, like honesty, ambition and enthusiasm. If you write this kind of letter in answer to an advertisement, you may be sure that most of the letters received by the prospective employer will be just like it. Therefore, if you want to head your letter toward the waste-basket, write it in this form.

"A better way is to analyze care fully the requirements stated by the employer and decide just how your own experience fits in with these requirements. Then lay your plans to demonstrate to the prospective employer that your previous training and experience have fitted you to be of service to him in the manner outlined in his advertisement.

"* * * When writing your letter of application bear firmly in mind that your prospective employer has no other means of appraising your services than by your letter. He is not a mind reader and can judge only from the actual contents of your letter.

"* * * You may be exceptionally capable in your field, but you will find yourself greatly handicapped in trying to better yourself if you do not write a good letter of application.

"* * * Therefore, unless you know that your letter will create a favorable first impression, do not waste postage on it."

A subscriber wrote us recently he had replied to more than 30 advertisements of positions that he was competent to fill but had not received an acknowledgment of a single letter. The general appearance of his letter to us was the answer.

Your letter of application may be

your one opportunity to secure just the position for which you are peculiarly fitted and have been looking all your life. You should make the most of it by giving it the same care you would a proposal to an heiress.

Electrical Merchandising

FOR SALE

Stock Taking Time

Now is the time to turn the surplus stock of metals you have on hand into cash. We buy all grades of scrap metals, small lots as well as small lots. Write us today and tell us what you have and we will be pleased to quote you prices. National Metal & Rubber Company, 30-31 India Wharf, Boston, Mass.

Motors for Sale

- 1—Triumph Electric Co. 50 H.P. class I. F. 220 Volt D.C. Motor, 188 Ampere, 800 R.P.M.
- 1—Triumph Electric Co. 40 H.P. Class I. F. 230 Volt D.C. Motor, 144 Ampere, 700 R.P.M.
- 1—Sprague Electric Co. 40 H.P. Type D 230 Volt D.C. Motor, 143 Ampere, 825 R.P.M.
- Greenpoint Metallic Bed Co., 236 Franklin St., Brooklyn, N. Y.

POSITIONS WANTED

YOUNG man, 26 years old, married, desires position on road or office sales dept., with jobber or manufacturer of electrical supplies. Technical graduate, four years' experience from helper to manager of electrical contracting business. Now employed as manager of contracting and storage battery business, but desires change which offers better future. Box 37, Elec. Merchandising, 935 Real Estate Trust Bldg., Philadelphia, Pa.

BUSINESS OPPORTUNITIES

Established Business for Sale

The best electric wiring and fixture shop in Milwaukee. Established 20 years; large trade in city and state. Other interests demand our attention. Will sell cheap. A great opportunity. Address Henry J. Wright, Apartment 5, 150 Biddle St., Milwaukee, Wis.

Business for Sale

Wiring, fixture and supply business, town of 25,000, about fifty miles from Detroit. Best location in the city, big new fixture display room, high class patronage. Owner wishes to confine time to engineering practice. About four thousand dollars will handle it. An excellent opportunity to step into a going business. Box 39, Elec. Merchandising, 1570 Old Colony Bldg., Chicago, Ill.

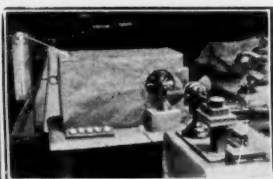
AGENTS AND SALESMEN

Sign Salesmen Wanted

Real sign salesmen (not mere order takers) with ability to sketch at least in the rough and with imagination. Address, with references, Box 35, Elec. Merchandising, 501 Rialto Bldg., San Francisco, Cal.

Two Salesmen Wanted

An opportunity that can be well understood by anyone familiar with the fixture situation is open for two men of caliber, to sell our "Vanco Bronze" Lighting Fixtures, in two territories. Men who are competent to meet dealers and architects. They obviously must have a knowledge of art; but by no means to be successful need they be "fixture salesmen" of the old school, inasmuch as "Vanco Bronze" fixtures are distinctly in a class by themselves. Only these two territories now open: Virginia, the Carolinas, Georgia, Alabama, Tennessee and Florida; the other territory includes Texas, Oklahoma, Arkansas, Kansas, Iowa (also Wisconsin and Minnesota) if desired. The Mitchell Vance Co., New York.

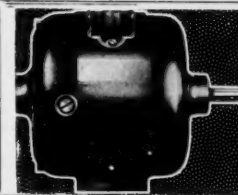


MR. DEALER In arguments with customers you need PROOF!

When disputes with customers arise over performance or fitness of electrical apparatus, don't argue—get the PROOF. Let us test the article. Our impartial and authoritative report settles the matter—satisfies all—at small cost.

LET US UMPIRE YOUR DISPUTES

Electrical Testing Laboratories, 80th Street and East End Avenue, New York City



DUMORE Fractional H-P MOTORS
FROM 1/100 TO 1/6 HP—A HIGH-GRADE MOTOR
For Every Purpose Universal Operates On A.C. or D.C.
WRITE FOR LITERATURE
Wisconsin Electric Co. 2500 Dumore Bldg. Racine, Wis.

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This is the Guide for the Buyer in the Market for Electrical Merchandise

Those concerns which advertise in Electrical Merchandising put their products in the Spot-light of Publicity and live up to the claims they make. They are listed below.

Batteries, Dry. Interstate Electric Novelty Co. Novo Mfg. Co. Western Electric Co.	Fuses. Chicago Fuse Mfg. Co. General Electric Co. Western Electric Co. Westinghouse El. & Mfg. Co.	Line Material. General Electric Co. Western Electric Co. Westinghouse El. & Mfg. Co.	Sirens, Motor. Federal Sign System (Electric).
Books, Electrical and Technical. McGraw-Hill Book Co.	Fuses, Refillable. Federal Sign System (Electric).	Motors, A. C. Century Electric Co. General Electric Co. Robbins & Myers Co., The. Western Electric Co. Westinghouse El. & Mfg. Co.	Sockets. General Electric Co. Pass & Seymour, Inc.
Boxes, Fuse. General Electric Co.	Glassware, Illuminating. Consolidated Lamp & Glass Co.	Motors, D. C. General Electric Co. Robbins & Myers Co., The. Western Electric Co. Westinghouse El. & Mfg. Co.	Stoves, Electric. Hughes Electric Heating Co.
Boxes, Junction and Outlet. General Electric Co.	Globes, Shades, etc. Adams-Bagnall Electric Co. Consolidated Lamp & Glass Co.	Motors, Fractional H. P. Westinghouse El. & Mfg. Co. Wisconsin Electric Co.	Supplies, Electrical. General Electric Co. Western Electric Co. Westinghouse El. & Mfg. Co.
Cable Clamps. Union Elec. Co.	Faries Mfg. Co. Gleason-Tiebout Glass Co.	Panel-boards. Adams-Bagnall Electric Co. General Electric Co. Westinghouse El. & Mfg. Co.	Switchboard Fittings. General Electric Co. Westinghouse El. & Mfg. Co.
Cash Registers. National Cash Register Co.	Heating Devices, Electric. American Electrical Heater Co. Hughes Electric Heating Co. Landers, Frary & Clark. Pittsburgh Electric Specialties Co.	Plugs, Attachment. Pass & Seymour, Inc.	Switchboards. General Electric Co. Western Electric Co. Westinghouse El. & Mfg. Co.
Chandeliers. Beardslee Chandelier Mfg. Co.	Instruments, Electrical. General Electric Co. Westinghouse El. & Mfg. Co.	Pole Line Hardware. Western Electric Co. Westinghouse El. & Mfg. Co.	Switches. General Electric Co. Pass & Seymour, Inc. Westinghouse El. & Mfg. Co.
Circuit Breakers. General Electric Co. Westinghouse El. & Mfg. Co.	Insulating Materials. General Electric Co. Westinghouse El. & Mfg. Co.	Protective Devices, Electric. General Electric Co. Westinghouse El. & Mfg. Co.	Switches, Time. Westinghouse El. & Mfg. Co.
Cleats. Pass & Seymour, Inc.	Ironing Machines, Electric. Hurley Machine Co.	Ranges, Electric. General Electric Co. Westinghouse El. & Mfg. Co.	Taps and Dies. Greenfield Tap & Die Corp.
Clusters. Federal Sign System (Electric).	Irons, Electric. American Electrical Heater Co. Pittsburgh Electric Specialties Co.	Receptacles. General Electric Co. Pass & Seymour, Inc.	Telephones. Western Electric Co.
Commutator Cleaners. Dyno Utilities Mfg. Co.	Lamp Locks. Pass & Seymour, Inc.	Rectifiers, Mercury Arc. General Electric Co. Westinghouse El. & Mfg. Co.	Testing Laboratories. Electrical Testing Laboratories.
Conduit, Flexible. Tubular Woven Fabric Co.	Lamps, Arc. Adams-Bagnall Electric Co. General Electric Co. Westinghouse El. & Mfg. Co.	Reflectors. Adams-Bagnall Electric Co. General Electric Co. A. B. Wilson Co.	Testing Service, Electrical. Electrical Testing Laboratories.
Conduit, Interior. Tubular Woven Fabric Co.	Lamps, Frosting. Union Electric Co.	Resistance Units. General Electric Co. Westinghouse El. & Mfg. Co.	Theater Dimmers. General Electric Co.
Conduit Fittings. Pass & Seymour, Inc.	Lamps, Incandescent. Edison Lamp Works. Franklin Elec. Mfg. Co. General Electric Co. National Lamp Works. Westinghouse Lamp Co.	Rheostats. General Electric Co. Westinghouse El. & Mfg. Co.	Tools, Linemen's. Western Electric Co. Westinghouse El. & Mfg. Co.
Controllers, Motor. General Electric Co. Westinghouse El. & Mfg. Co.	Lamps, Portable. Faries Mfg. Co.	Rosettes. Pass & Seymour, Inc.	Tools, Portable Electric. Wisconsin Electric Co.
Cooking Appliances, Electric. American Electrical Heater Co. General Electric Co. Landers, Frary & Clark. Western Electric Co. Westinghouse El. & Mfg. Co.	Lanterns, Battery. Interstate Electric Novelty Co.	Searchlights, Electric Auto, Etc. Pittsburgh Electric Specialties Co.	Transformers. Adams-Bagnall Electric Co. General Electric Co. Westinghouse El. & Mfg. Co.
Display Fixtures. Universal Fixture Co.	Lighting Units. Beardslee Chandelier Mfg. Co. General Electric Co. Luminous Units. Universal Fixtures Co. Westinghouse El. & Mfg. Co.	Shade Holders. Adams-Bagnall Electric Co. A. B. Wilson Co.	Vacuum Cleaners, Electric. Apex Electrical Mfg. Co. Eureka Vacuum Cleaner Co. Hoover Suction Sweeper Co. Hurley Machine Co. Innovation Electric Co. United Electric Co. Western Electric Co. Wisconsin Electric Co.
Fan Motors. Adams-Bagnall Electric Co. Century Electric Co. General Electric Co. Gilbert & Co., A. C. Robbins & Myers Co., The. Western Electric Co. Westinghouse El. & Mfg. Co.		Signs, Electric. Federal Sign System (Electric).	Washing Machines, Electric. Hurley Machine Co. Western Electric Co.
Fans, Exhaust and Ventilating. Adams-Bagnall Electric Co. Robbins & Myers Co., The. Westinghouse El. & Mfg. Co.		Sign Letters. Federal Sign System (Electric).	Window Displays. Doty & Scrimgeour Sales Co.
Fixtures, Electric and Gas. Adams-Bagnall Electric Co. Beardslee Chandelier Mfg. Co. Faries Mfg. Co. Federal Sign System (Electric).			Wires and Cables. Electric Cable Co. General Electric Co. Western Electric Co.
Flashlights. Interstate Electric Novelty Co.			Wiring Devices. General Electric Co.

Save This Issue Because—It is the intention of the publishers of *Electrical Merchandising* shortly to present a new form of index of unusual value to readers. To get full benefit from it, it will be necessary for you to save each issue.



**The \$5 Fan with
Two Speeds.**

A Whirlwind Seller!

Bigger Value Than Ever

The new Model C Polar Cub Electric Fan will still sell for the low price of \$5 which made the Polar Cub the sensation of the fan industry. But in value it is far ahead of previous years.

It now has two speeds and stop—the \$5 fan with two speeds. At high speed it gives a much stronger breeze than ever before.

The frame is die-cast, thus eliminating 57 different parts. It cannot possibly get out of alignment. Bearings are an integral part of the die-casting. The guard is spot-welded and is positively unbreakable.

The fan is adjustable to any angle—breeze can be thrown in any direction. The base has a hook for attaching to the wall if desired. Porcelain insulated. Equipped with 8-foot cord and plug. Blade diameter 6"—height of fan 8". Net weight 3 lb. 5 oz.

Backed by a powerful campaign of national advertising throughout the selling season. Big space in *The Saturday Evening Post*, *Collier's* and other magazines.

\$1.25 PROFIT ON EVERY FAN

Trade discounts as follows:

Less than 6 Fans.....\$5.00 each

Six Fans and over..... 3.75 each

Terms: 2/10/30, f.o.b. New Haven,

full freight allowed.

Fans packed 6 and 12 to the package. Upon request we furnish free striking, sales-making store display material.

Order Early—We have largely increased our production facilities, but, despite this, the demand will exceed the supply. Place your order now. If further information is wanted, write us.

The A.C. Gilbert
CO

402 Fox St., New Haven, Conn., U.S.A.

Canadian Representatives:
Menzies & Co., Limited, Toronto, Ont., Can.



“That’s the Fan I Want”

The ten years of persistent advertising on Robbins & Myers Fans in the leading National Weeklies has made Robbins & Myers Quality known to every prospective fan user.

Everyone knows that the fan with the flag on the guard is one that can always be depended upon to give absolutely reliable, efficient service. Every fan prospect knows that the flag on the guard is the best guarantee of fan service he can get—a guarantee which is not hedged about with its restrictions—one which simply and clearly says: “The fan must give satisfaction or the manufacturer will.”

This knowledge the public has of Robbins & Myers Quality and the policy back of the Robbins & Myers Product, together with the liberal, straightforward

dealer policy of The Robbins & Myers Company, insures the dealer a good profit on his Robbins & Myers Fans.

The fans move without special sales effort on his part and save selling expense. And once sold they stay sold. There are no profit-eating come-backs, no heavy service expenses.

In addition to the National advertising, The Robbins & Myers Company supplies the dealer a liberal line of window displays, circulars, booklets, lantern slides and ad cuts. And it is all prepared especially for the dealer in his own name, the kind he can use to advertise his business alone.

The R & M line is made in the new drawn-steel construction in all sizes and types.

Catalogues, price lists and information on the complete line of selling helps for dealers will be furnished on request.



THE ROBBINS & MYERS CO.
SPRINGFIELD, OHIO

New York
 Cincinnati

Boston
 Chicago

Philadelphia
 St. Louis

Rochester

Cleveland
 San Francisco



Robbins & Myers Fans

"Not the name of a thing, but the mark of a service"

MAZDA



MAZDA Service
—a systematic re-
search for mak-
ing lamps more
economical

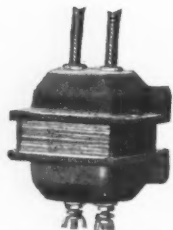
THE MEANING OF MAZDA

MAZDA is the trademark of a world-wide service to certain lamp manufacturers. Its purpose is to collect and select scientific and practical information concerning progress and developments in the art of incandescent lamp manufacturing and to distribute this information to the companies entitled to receive this Service.

MAZDA Service is centered in the Research Laboratories of the General Electric Company at Schenectady. The mark MAZDA can appear only on lamps which meet the standards of MAZDA Service. It is thus an assurance of quality. This trademark is the property of the General Electric Company.



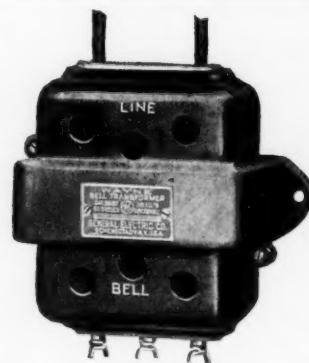
RESEARCH LABORATORIES OF GENERAL ELECTRIC COMPANY



Cat. No. 179541
Household Size
Will ring three
3-inch bells



Cat. No. 191395
Medium Size
Will ring fifteen
2-inch bells



Cat. No. 99192
Large Size
Will ring thirty
2-inch bells

Wayne Bell Ringing Transformers a Desirable Feature of Any Wiring Plan

The complete line of Wayne Bell Ringing Transformers, consisting of household size, medium and large, gives a transformer for practically any Bell Ringing requirement. They are listed for standard voltages and frequencies.

A Good Proposition for Central Stations

The installation of a Bell Ringing transformer ties your customers more securely to your lines. New tenants of a house so equipped will have to use electric service or go to the trouble of installing batteries to ring their door-bell. When installing the A.C. meter see that a Bell Ringing transformer is installed—if none has previously been put in.

Good Profits for Dealers and Contractors

An electrical dealer must sell a good many sets of batteries to the same customer to equal the profit he would get from that customer through the sale of one Bell Ringing transformer. While the customer is *your* customer, why not make sure of the larger profit? Contractors, in addition to the profit on the transformer, can usually install it. This brings another profit and may also lead to future jobs in the same household or offer opportunities for appliance sales.

Wayne Bell Ringing Transformers are easy to install, will give dependable service indefinitely, and are tamper-proof. Selling helps will be supplied on request.

Booklet B-3400 contains detailed information on all three sizes of Wayne Bell Ringing Transformers.

General Electric Company

Atlanta, Ga.
Baltimore, Md.
Birmingham, Ala.
Boston, Mass.
Buffalo, N. Y.
Butte, Mont.
Charleston, W. Va.
Charlotte, N. C.
Chattanooga, Tenn.
Chicago, Ill.
Cincinnati, Ohio
Cleveland, Ohio

Columbus, Ohio
*Dallas, Tex.
Dayton, Ohio
Denver, Colo.
†Detroit, Mich.
Des Moines, Iowa
Duluth, Minn.
Elmira, N. Y.
Erie, Pa.
*El Paso, Tex.
Fort Wayne, Ind.
Hartford, Conn.

General Office: Schenectady, N. Y.

ADDRESS NEAREST CITY

*Houston, Tex.
Indianapolis, Ind.
Jacksonville, Fla.
Joplin, Mo.
Kansas City, Mo.
Knoxville, Tenn.



Los Angeles, Cal.
Louisville, Ky.
Memphis, Tenn.
Milwaukee, Wis.
Minneapolis, Minn.
Nashville, Tenn.

New Haven, Conn.
New Orleans, La.
New York, N. Y.
Niagara Falls, N. Y.
*Oklahoma City, Okla.
Omaha, Neb.
Philadelphia, Pa.
Pittsburg, Pa.
Portland, Ore.
Providence, R. I.
Richmond, Va.
Rochester, N. Y.

St. Louis, Mo.
Salt Lake City, Utah
San Francisco, Cal.
Schenectady, N. Y.
Seattle, Wash.
Spokane, Wash.
Springfield, Mass.
Syracuse, N. Y.
Toledo, Ohio
Washington, D. C.
Youngstown, Ohio.

*Southwest General Electric Company. †General Electric Company of Michigan.

FOR CANADIAN BUSINESS refer to Canadian General Electric Company, Ltd., Toronto, Ont.

GENERAL FOREIGN SALES OFFICE, Schenectady, N. Y.; 30 Church St., New York City; 83 Cannon St., London, E. C., England

6776

G-E "Standard" Separable Attaching Plugs and Receptacles



GE543
Concealed Receptacle



GE624
Miniature Attaching Plug



GE544
Cleat Receptacle



GE625
Moulded Cap



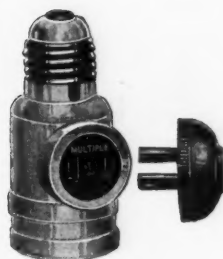
GE662
Metal Covered Cap



GE663
Moulded Polarity Cap



GE658 and 49491 (plate)
Single Outlet
Flush Receptacle



GE696
Combination Socket
and Attaching Plug



GE694 and GE695 (plate)
Double Outlet
Flush Receptacle

A representative assortment of G-E "Standard" interchangeable devices is shown above. The complete line is sold by distributors in all large cities.

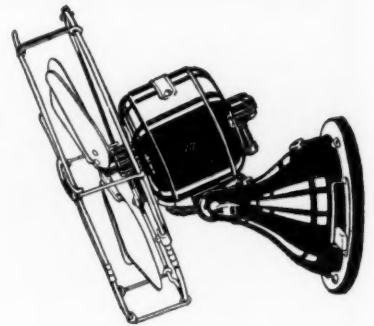
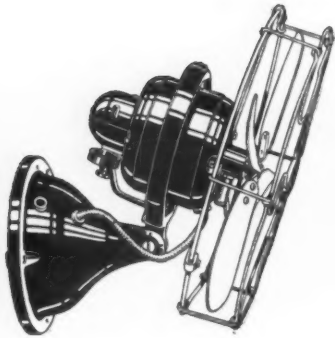
General Electric Company

General Office:



Schenectady, N. Y.

Sales Offices in All Large Cities

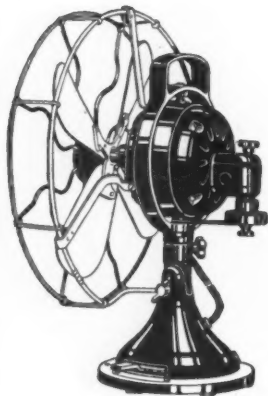


The Nine-Inch Fan Leads the G-E Line for 1917

The increasing popularity of the new nine-inch fan, first introduced last season, has resulted in this size being made the leader for the 1917 season. Its sturdy construction, high quality and pleasing olive-green finish (standard for this type), coupled with its moderate price makes the G-E nine-inch fan a very satisfactory one to sell. Made in both stationary and oscillating types.

G-E Twelve and Sixteen-Inch Fans

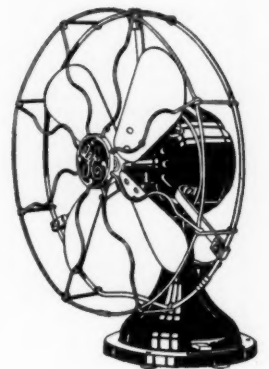
are as good as ever and their popularity has not been lessened by the heavy demand for the smaller fan.



12" Oscillating Fan



16" Oscillating Fan



12" Stationary Type

**Advance Orders Indicate an Unprecedented Demand—
Order Early**

General Electric Company

Atlanta, Ga.
Baltimore, Md.
Birmingham, Ala.
Boston, Mass.
Buffalo, N. Y.
Butte, Mont.
Charleston, W. Va.
Charlotte, N. C.
Chattanooga, Tenn.
Chicago, Ill.
Cincinnati, Ohio
Cleveland, Ohio

Columbus, Ohio
*Dallas, Tex.
Dayton, Ohio
Denver, Colo.
†Detroit, Mich.
Des Moines, Iowa
Duluth, Minn.
Elmira, N. Y.
Erie, Pa.
*El Paso, Tex.
Fort Wayne, Ind.
Hartford, Conn.

General Office: Schenectady, N.Y.

ADDRESS NEAREST CITY

*Houston, Tex.
Indianapolis, Ind.
Jacksonville, Fla.
Joplin, Mo.
Kansas City, Mo.
Knoxville, Tenn.



Los Angeles, Cal.
Louisville, Ky.
Memphis, Tenn.
Milwaukee, Wis.
Minneapolis, Minn.
Nashville, Tenn.

New Haven, Conn.
New Orleans, La.
New York, N. Y.
Niagara Falls, N. Y.
*Oklahoma City, Okla.
Omaha, Neb.
Philadelphia, Pa.
Pittsburgh, Pa.
Portland, Ore.
Providence, R. I.
Richmond, Va.
Rochester, N. Y.

St. Louis, Mo.
Salt Lake City, Utah
San Francisco, Cal.
Schenectady, N. Y.
Seattle, Wash.
Spokane, Wash.
Springfield, Mass.
Syracuse, N. Y.
Toledo, Ohio
Washington, D. C.
Youngstown, Ohio

*Southwest General Electric Company. †General Electric Company of Michigan.

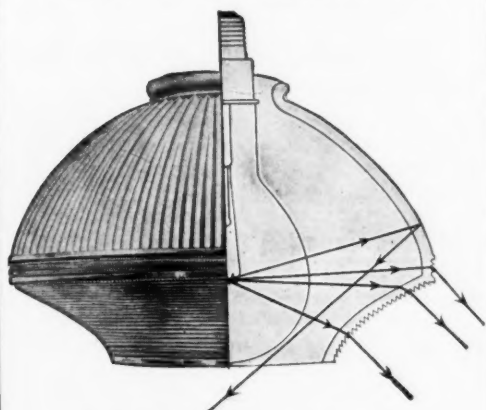
For CANADIAN BUSINESS refer to Canadian General Electric Company, Ltd., Toronto, Ont.

GENERAL FOREIGN SALES OFFICES, Schenectady, N. Y.; 30 Church St., New York City; 83 Cannon St., London, E. C., England.

Introductory Offer

on the new Holophane Reflector-Refractor for Schools, Offices, Stores, Textile Industries

HOLOPHANE Reflector-Refractor



- 2110 Reflector-Refractor 7½ in. diameter for 75 and 100 Watt "C" Lamps.
 2120 Reflector-Refractor 9½ in. diameter for 100 and 200 Watt "C" Lamps.
 2130 Reflector-Refractor 12 in. diameter for 300 and 400 Watt "C" Lamps.

"The Light of a Thousand Uses"

The only enclosing unit designed for 75 to 500 Watt Type C Lamps which redirects the useful light properly on the working plane.

The live dealer who pushes this unit will make money. Here are some of the installations recently made by live ones:—

- 500 Initial Order, Brooklyn Edison Co.'s new Store Lighting Campaign.
- 400 Block & Kuhl Dept. Store, Peoria, Ill.
- 150 Schulte Cigar Stores Corp., New York City.
- 100 DuPont High School, Wilmington, Del.
- 100 Hart Dept. Store, Long Prairie, Minn.
- 75 Schools No. 7 and No. 17, Buffalo, N. Y.
- 100 Degnon Building, New York City.

Our Offer

To enable you to prove the value of No. 2110 V. F. (F-R 75-100 W. Type C Lamps) to your trade we make the following offer:—

Up to and including Friday, April 20th, we will give you free Five Holophane No. 2110 V. F. Reflector-Refractors with every order of Fifteen.

Twenty of these units—a standard package—you paying for Fifteen—at standard package discounts.

If you place your order through your jobber it's the same to us. *One standard package only to each customer.*

Dealer helps are being mailed which will assist you in pushing No. 2110.

In the meantime, use the coupon. Get busy now for the Spring campaign. Remember this offer expires absolutely Friday, April 20, 1917.

Write for Catalog—Use this coupon to order



340 Madison Avenue
New York City

Please send us 20 Holophane 2110 V.F. Reflector-Refractors @ \$2.10 each list, with the understanding you are to charge for 15 only. Prevailing standard package discounts and terms to apply on this order.

Name.....

Address.....

Dealers! New Business Managers! Electrical Contractors! Heres The

"New Submarine" TYPE B-1 **Apex Electric Suction Cleaner**

The "Heavy-Duty" Cleaner You've Been Waiting For

THE daring design tells the story:—*built for efficiency!* The big, powerful motor makes truly cyclonic suction thru the long "snoopy" nozzle;—even hair-pins, heavy pebbles, adhesive lint, hair, threads and strings are easy prey for this cleaner,—the "submarine" will get it *ALL!* It's a heavy-duty cleaner for stores, hotels, offices, large homes, etc.,—where great expanses of floor covering must be cleaned thoroughly and quickly.

RETAILS FOR \$50

A high-power, high-profit cleaner,—supported by a worth-while FACTORY GUARANTEE! Attachment Sets for this type cleaner retail for \$10 extra.

Special "Submarine" Features

Automatic Adjustment

The Apex Submarine can run easily from bare floors to thickest nap or pile rugs and carpet,—cleaning both with maximum power. The body of the cleaner is mounted on three wheel chassis, which automatically operates the new self-adjusting nozzle feature.

REVOLVING BRUSH: Traction Operated

To dislodge deeply imbedded and hard-to-pick-up threads, lint, hair, etc., an improved-type brush revolves in a sunken housing so that the suction passes over merely the brush ends.

THE UNUSUAL NOZZLE of the "Submarine"

pronounces its great "gets-under-things" ability. It measures 14 inches across the front and allows 35 square inches of powerful-suction-cleaning exposure to be continuously applied against the floor.

Write for folder and prices on this new Type B-1 Apex Electric Suction Cleaner,—better still order sample machine for trial and demonstration.

**Here's
HOW the
"Submarine"
GETS UNDER**



The Apex Electrical Manufacturing Co.

FACTORY and OFFICES: 1111 Power Ave., CLEVELAND, OHIO, U. S. A.

Call or Write Your Nearest APEX Distributor for More Particulars.

ATLANTA, GA. - Baltimore Elect. Supply Co.
BOSTON, MASS. - Wetmore-Savage Co.
BALTIMORE, MD. - Baltimore Elect. Supply Co.
CLEVELAND, OHIO - The Stroud-Michael Co.
CHICAGO, ILL. - Illinois Electric Co.
DENVER, COLO. - The New England Elect. Co.
DES MOINES, IOWA - Mid-West Electric Co.
ELKHART, IND. - J. B. Fullerton, Factory Rep.
INDIANAPOLIS, IND. - Hatfield Electric Co.
KANSAS CITY, MO. - The B-R Elect. & Tel. Mfg. Co.

ST. LOUIS, MO.
SALT LAKE CITY, UTAH
SAN FRANCISCO, CALIF.
WASHINGTON, T. C.

LINCOLN, NEB. - The Kormsmeier Co.
LOUISVILLE, KY. - Belknap Hardware & Mfg. Co.
LOS ANGELES, CALIF. - Illinois Electric Co.
MILWAUKEE, WIS. - Julius Andrea & Sons Co.
NEW HAVEN, CONN. - The Hessel & Hoppen Co.
NEW YORK CITY - Kimball Elect. Const. Co.
OMAHA, NEB. - Mid-West Elect. Co.
PITTSBURGH, PA. - Doubleday-Hill Elect. Co.
PHILADELPHIA, PA. - Frank H. Stewart Elect. Co.
PORTLAND, ORE. - Fobes Supply Co.

Wesco Supply Co.
Inter-Mount'n Elect. Co.
Elect. Ry. & Mfgs. Sup. Co.
Doubleday-Hill Elect Co.





Store width 18 ft. Ceiling height 12 ft. Fixture length 3 ft. Outlet spacing 10 ft.

Very many stores much like this one you will find effectively lighted by

Bayley's Equalite No. 4886-E

(Fully covered by both structural and design patents)

Easy to maintain. One size takes from 100 to 500 watt Type C lamps.

They have that something—individuality and character of design—that adds to the appearance of stores of the better class; and at the same time they do not “overdress” surroundings of a less pretentious nature.

Many thousands now in use in stores, offices, public buildings, railway stations, telephone and telegraph buildings.

We can help you to bigger lighting business.

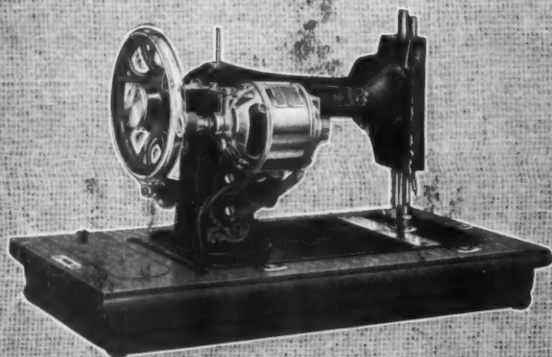
BAYLEY & SONS, Inc.

Designers and Makers of Fine Lighting Fixtures

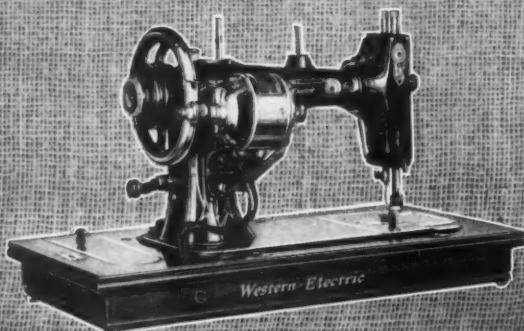
Factory
117 Vanderveer St., Brooklyn, N. Y.

Sales Dept.
103 Park Ave., New York

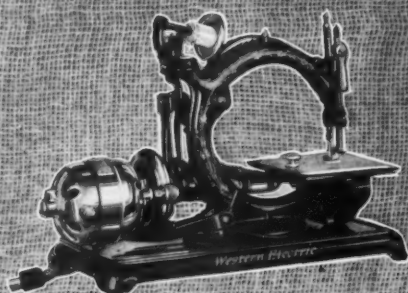
A COMPLETE LINE AND



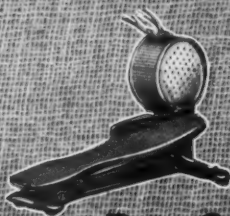
**No. 1
VIBRATOR TYPE**



**No. 2
ROTARY TYPE**



**No. 3
AUTOMATIC TYPE**



FOOT CONTROL

**For
Every
Sewing Requirement**

THERE IS A

**Western Electric
PORTABLE
SEWING MACHINE**

No. 1—VIBRATOR TYPE

Most commonly used—has vibrating shuttle—equipped with automatic tension, automatic stitch regulator and other desirable features.

No. 2—ROTARY TYPE

Has rotating bobbin—smooth running—runs one-third faster than vibrator type—a time saver.

No. 3—AUTOMATIC TYPE

Also known as the single thread machine—produces chain stitch without a bobbin—stitch can be unraveled by breaking thread at any point—an advantage in remodeling garments.

**Backed by a Ten Year Guarantee
Order your stock at once**

Western Electric Company

INCORPORATED

New York	Atlanta	Chicago	Kansas City	San Francisco
Buffalo	Richmond	Milwaukee	St. Louis	Oakland
Newark	Savannah	Indianapolis	Dallas	Los Angeles
Philadelphia	New Orleans	Detroit	Houston	Seattle
Boston	Birmingham	Cleveland	Oklahoma City	Portland
Pittsburgh	Cincinnati	Minneapolis	St. Paul	Omaha
			Denver	Salt Lake City

EQUIPMENT FOR EVERY ELECTRICAL NEED

Member Society for Electrical Development. "Do it Electrically"



CARRYING CASE

A COMPLETE CAMPAIGN

For
Every
Progressive Dealer

HANDLING THE
Western Electric
PORTABLE
SEWING MACHINE

OUR NATIONAL ADVERTISING

In the Spring numbers of women's magazines is popularizing these wonderful machines. It directs the reader to you—the dealer. Tie up to this big advertising campaign by using—

OUR FREE SALES HELPS

It costs you nothing to get them—but it does cost you profitable business if you do not. Some of the sales helps are illustrated on this page—all of them are attractive and all are real business getters.

Write to-day for full details of our complete sales campaign

Western Electric Company

INCORPORATED
New York Atlanta Chicago Kansas City San Francisco
Buffalo Richmond Milwaukee St. Louis Oakland
Newark Savannah Indianapolis Dallas Los Angeles
Philadelphia New Orleans Detroit Houston Seattle
Boston Birmingham Cleveland Oklahoma City Portland
Pittsburgh Cincinnati Minneapolis St. Paul Omaha Denver Salt Lake City

EQUIPMENT FOR EVERY ELECTRICAL NEED
Member Society for Electrical Development. "Do it Electrically"



CAR CARD
C-709



SMALL
FOLDER
B-131



SM-9



SM-10



SM-11

NEWSPAPER PRINTING PLATES



WINDOW DISPLAY-W-108



LS-342



LS-345

LANTERN SLIDES

WIRE YOUR



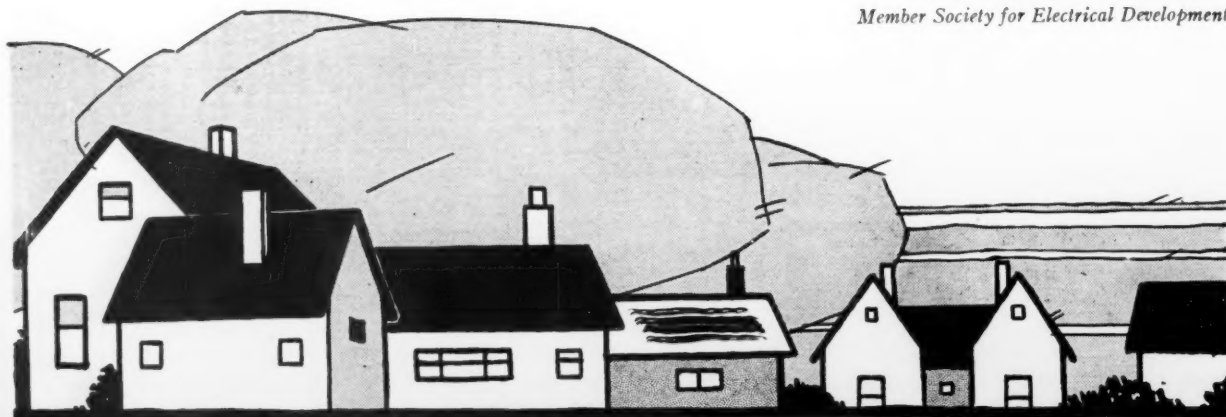
SPRINGTIME is house-wiring time. Thirty-four per cent of the total year's house wiring contracts in one representative American city are secured during March, April and May—and this in spite of the fact that no special spring campaign is carried on.

We are better prepared this spring than ever to help you get already-built houses wired for electric service. In connection with your special drive for this business get our new house-wiring window

NATIONAL LAMP WORKS

OF GENERAL ELECTRIC CO.
NELA PARK CLEVELAND

Member Society for Electrical Development.



HOME TIME

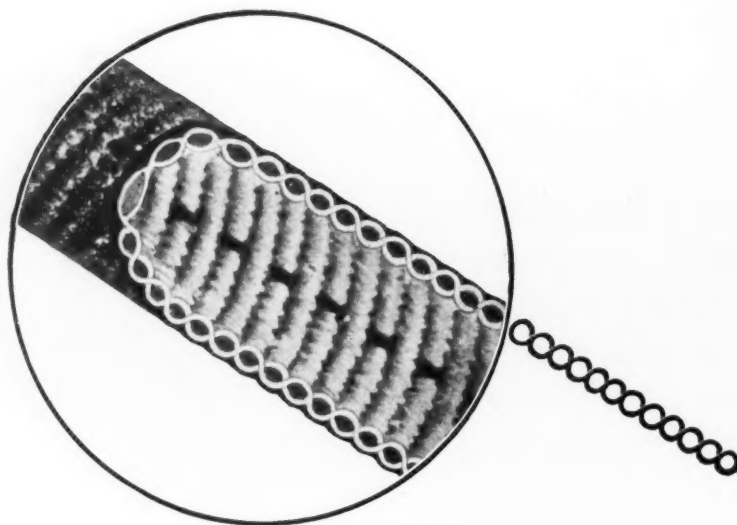
trim. It is a real interest-arousing feature. We also have a number of advertisements attractively illustrated to suit the space you will use in your newspapers. Better put your order in at once so you'll be sure of the best attention. For this free service write to the Sales Division that furnishes you National MAZDA lamps.

NATIONAL LAMP WORKS

OF GENERAL ELECTRIC CO.
NELA PARK CLEVELAND

"DO IT ELECTRICALLY"





The single-wall
feature of

DURADUCT

(Reg. U. S. Patent Office)

Duraduct is the only flexible non-metallic conduit with a single wall.

Therefore it is the only one that gets away from the breaking down and blistering which is a part of multiple-wall construction.

Which do you want?

All good jobbers carry Duraduct.

TUBULAR WOVEN FABRIC COMPANY
MANUFACTURERS — PAWTUCKET, R. I.
GENERAL SALES AGENT — A. HALL BERRY
97 WARREN ST. NEW YORK — 950 CLINTON ST. CHICAGO.

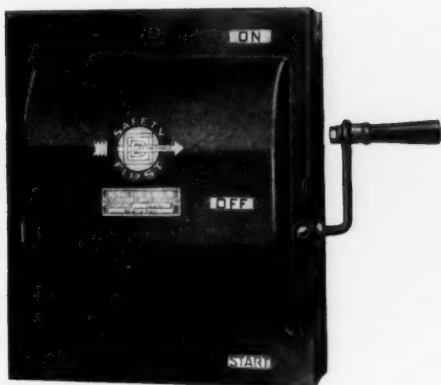
Northern Electric Company Distributors for Canada
LIMITED

THE BLACK DOTTED LINE IS THE MARK OF
DURADUCT

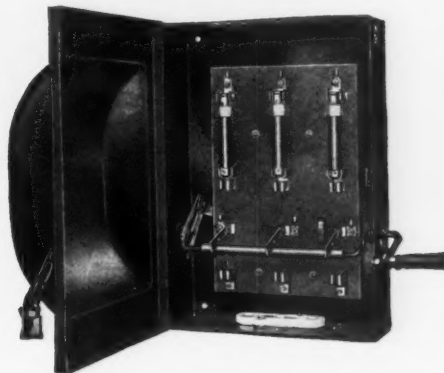


Electrical Contractors

**Boost Your Profits—Install
"SQUARE D" Enclosed Switches**



Catalog No. 66341, New "Square D" Steel Enclosed Double Throw Motor Starting Switch, 3 Pole, 30 Amp., 500 V.



Catalog No. 66341, Open New "Square D" Steel Enclosed Double Throw Motor Starting Switch.

THE big demand is now for Enclosed "Safety First" Switches. Why not carry in stock "Square D" Enclosed Switches in place of the open knife ones you have carried heretofore? Why continue to install the dangerous open knife switch when you can give your customers more satisfactory and safer installations by installing "Square D" Enclosed Switches and at the same time boost your own profits?

You Are in Business for Money

You want to give good service—your customers want their installations on the "Safety First" basis, and they will thank you for calling their attention to "Square D" Enclosed Switches—if you don't believe it try it on your next job. See how easily a suggestion may be turned into extra profits for you.

The New "SQUARE D" Steel Enclosed Motor Starting Switch is the Biggest Switch Factor Ever Placed on the Market

This new "Square D" Enclosed Starter is now being installed throughout the United States and Canada in thousands of plants by hundreds of electrical contractors.

Every "Square D" Steel Enclosed Double Throw Motor Starting Switch you install earns you more profit than you make on an ordinary open knife starter.

Compare These Profits

10 Ordinary Open Knife Starters,
\$44.00—Your Profit, \$8.80

10 "SQUARE D" Enclosed Starters,
\$76.00—Your Profit, \$15.20

*10 jobs a month like this increase your net earnings
\$768.00 per year!*

Our New Policy

On January first, nineteen seventeen, we put into effect Special Discounts for all Electrical Contractors on "Square D" Switches and Motor Starters—we protect you on the price—the only man who can buy "Square D" devices at a lower cost than YOU is your jobber.

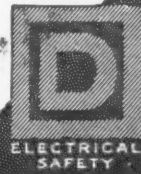
We offer you the opportunity to boost your profits and expect you to quickly take advantage of it.

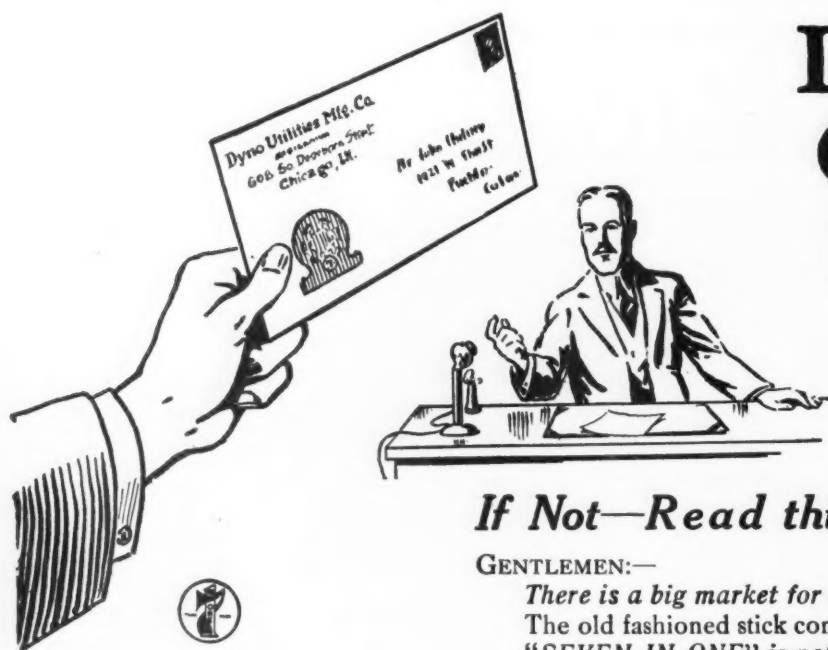
Write us today for our new Catalog No. 23 with complete information on the New "Square D" Steel Enclosed Double Throw Motor Starting Switch and our Special Discounts to Electrical Contractors on the entire line of "Square D" Enclosed Switches.

DETROIT FUSE & MFG. CO.

1412 Rivard Street, Detroit, Mich.

BRANCHES: New York Denver Walkerville, Ont.
Birmingham San Francisco Toronto, Ont.





Did You Get Our Letter?

If Not—Read this Copy Carefully

GENTLEMEN:—

There is a big market for a real commutator cleaner.

The old fashioned stick compounds have proven failures.

"SEVEN IN ONE" is not a Stick compound.

It is a "Commutator Re-surfacer" that *Cleans*. It removes all the dirt and grease from the commutator, leaving a bright smooth surface;—reduces the friction and increases the efficiency of the motor; stops SPARKING, HEATING, CUTTING;—removes SURFACE SHORTS and best of all ELIMINATES SANDPAPER.

We are now making exclusive selling agencies, contracting with one Electrical supply house in each territory.

Our PROPOSITION—We will give you exclusive sale and protection, extend our agency discount of 40% from list prices shown in enclosed folder. We will circularize your territory with live advertising matter, send an expert to work with your salesmen and endeavor to assist in every way to build up a profitable trade on "SEVEN IN ONE" Commutator Re-surfacer.

FURTHER—we will guarantee the sale of "SEVEN IN ONE" and if you do not find the demand justifies you in continuing the agency will take back all the unsold stock at the end of six months.

"SEVEN IN ONE" is packed in cartons of six one oz. cans.

You can put in a stock of 24 cartons for \$43.20. You cannot afford to let your competitor get this agency. Send in your order at once for 24 cartons and we will forward agency contract.

Awaiting your favorable reply, we are

Very truly yours,
DYNO UTILITIES MFG. CO.

Did You Ever Read a Fairer Proposition?

Is the Profit Enough?

Does the Guarantee Convince You?

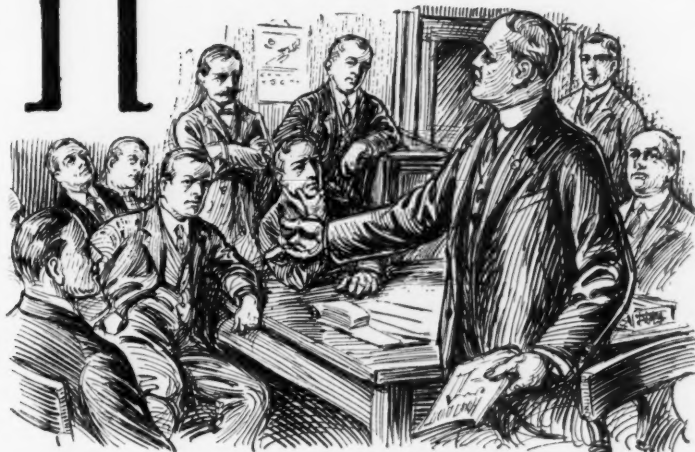
Do You want an Exclusive Agency?



Very desirable territory still open. Letters are coming in every day. If you want this good proposition write at once.

DYNO UTILITIES
MFG. CO., INC.
608 South Dearborn St.
CHICAGO

The How-I-Did-It Club



Start One in YOUR Office —as a Sales Stimulator

An enthusiastic reader of and contributor to "How-I-Did-It" suggests that the salesmen employed by central stations, jobbers and dealers start informal local "How-I-Did-It" clubs to—

- (a) discuss and digest the lamp selling stories each month.
- (b) relate to their fellow salesmen their own experiences in the "that reminds me" spirit.
- (c) delegate one or more members each month to send a contribution to "How-I-Did-It."

The sales benefit of having a discussion of selling experiences once a month is obvious.



MAILED FREE

"How-I-Did-It" will be mailed free every month to each member of the club. Each copy contains enough selling inspirations to make the meeting an enthusiastic one. The stories are directly helpful and offer the salesmen and managers opportunities to help each other, and benefit themselves. Back numbers may be had for the asking, as long as they last.

The financial reward for having a story appear in "How-I-Did-It" is certainly worth while.

Every sales manager who has to do with selling Mazda lamps of any make should send for a copy of "How-I-Did-It" and judge the broad-gauge helpful influence of the stories each issue contains.

Every salesman employed by a central station, dealer or contractor is requested to send in the story of his most interesting sale of lamps. Each month we pay \$15.00 for the best story and \$10.00 for the second best. For every other story we accept we pay \$2.00 each. The book of rules governing the contribution of stories will be sent on request.

Send for the Copies Which You Desire Now

Westinghouse Lamp Company

Atlanta
Baltimore
Boston
Buffalo

Chicago
Cincinnati
Cleveland
Columbus

*Dallas
Denver
Detroit
Kansas City

Los Angeles
Milwaukee
New Orleans
New York

Philadelphia
Pittsburgh
Portland
St. Louis

Salt Lake City
San Francisco
Seattle
Syracuse

*Westinghouse Lamp Corporation.
Export Sales Dept., 165 Broadway, N. Y. C.
For Canada—Canadian Westinghouse Co., Limited, Hamilton, Ont.

Westinghouse Sew Motors

Ten Big Selling Points

"This is why I sell the Westinghouse 'Sew-Motor' said one dealer to another.

"In the first place the 'Sew-Motor' has more real selling points than any other sewing machine motor. In the second place the Westinghouse Company helps its dealers to sell the 'Sew-Motor.'—The merchandising plan they send out is a wonder, and every piece of literature they furnish is attractive and useful. Their popular and trade advertising increases dealers' sales. Don't ask me why. Try it, and see for yourself. A card to the nearest Westinghouse District Office will bring you a good proposition."

Westinghouse Electric & Manufacturing Company

East Pittsburgh, Pa.



"Sew-Motor" folds up with head of Machine.

Operator sits in natural position facing needle with foot on treadle.

Positive belt drive—no cork pulleys to be replaced.

Speed regulator out of way, permanently attached to machine.

Speed regulator gives any speed from zero to 800 stitches per minute.

Motor out of way when operating, leaving right-hand side of machine-table clear.

Motor quiet in operation.

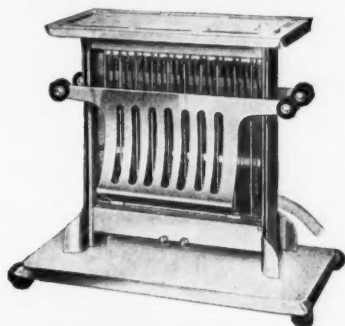
Absolutely clean. Lubricated with grease cups, no danger of oil running out on work.

Motor permanently attached to machine. Does not depend on its weight alone to hold it in place, no danger of its slipping out of place.

Comprehensive dealer helps and service.



UNIVERSAL Electric Iron with
Snap Switch, No. E-9081, \$16.00.



UNIVERSAL Electric Toaster
No. E-946, \$4.50.



UNIVERSAL Combination Disc
Stove and Chafer, No. E-9810,
\$12.00.



UNIVERSAL Electric Coffee Urn
No. E-9136, \$10.75.



UNIVERSAL Electric Tea Ball
Tea Pot No. E-904, \$8.50.



UNIVERSAL Electric Four-Heat
Grill No. E-984, \$6.50.

250 Patterns Universal Electric Home Needs

of which these six are "shining examples."

For generations the American housewife has recognized that the UNIVERSAL trade mark stood for all that is best in household appliances.

Naturally when our electrical line was developed it made an instant appeal and its popularity is growing by leaps and bounds.

When properly displayed these beautiful and fascinating electric devices sell themselves.

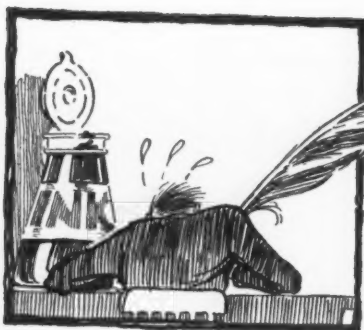
All UNIVERSAL liquid heaters are equipped with Safety Fuse Plugs, which protect the unit from overheating.

This Trade-mark
is on



Every Piece or
Label

Landers, Frary & Clark
NEW BRITAIN, CONN.



Bingles from the B.M.'s Bat

Business is business
—and business literature is an important
part of it





Profitable Sellers at all Times

A small margin of profit on a product that is a "repeater"—a product that brings the customer back to buy again and again—is a better article to stock than a product that yields a larger profit on the initial sale but makes no provision for a "repeat."

Franco Flashlights

not only yield a generous profit on the initial sale (and build *good will* through *good service*) but insure other liberal profits on repeat sales of Radio Batteries. No flash-

light on the market today has the sales-closing talking points and real service merit of Franco Flashlights. Write NOW for catalog and price list.

INTERSTATE ELECTRIC NOVELTY CO.

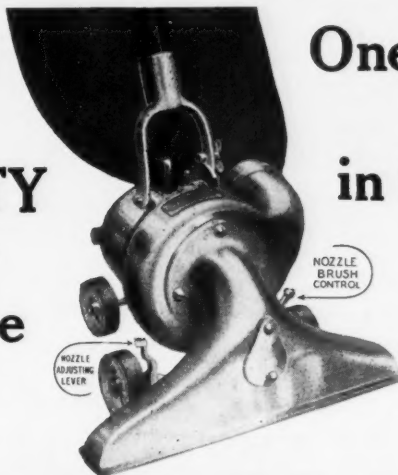
104-114 South 4th Street, Brooklyn, N. Y.

Chicago

San Francisco

Toronto

UNCLE SAM
Chooses
the **NEW LIBERTY**
CLEANER for
U. S. Post Office
Service



One Lighting Co.
Sells 800
in One Month—
A New
Record



The NEW LIBERTY CLEANER

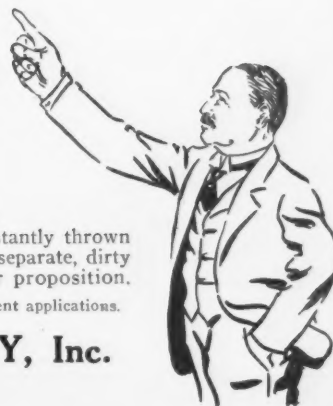
Handsome, efficient, durable. Many exclusive features. The only cleaner with an inside nozzle brush which can be instantly thrown into action by a touch of the foot. It eliminates handling of a separate, dirty and unsanitary brush. **Get in line—write NOW** for liberal dealer proposition.

Made for us by the General Electric Co., under the Kenney patents and our patent applications.

INNOVATION ELECTRIC COMPANY, Inc.

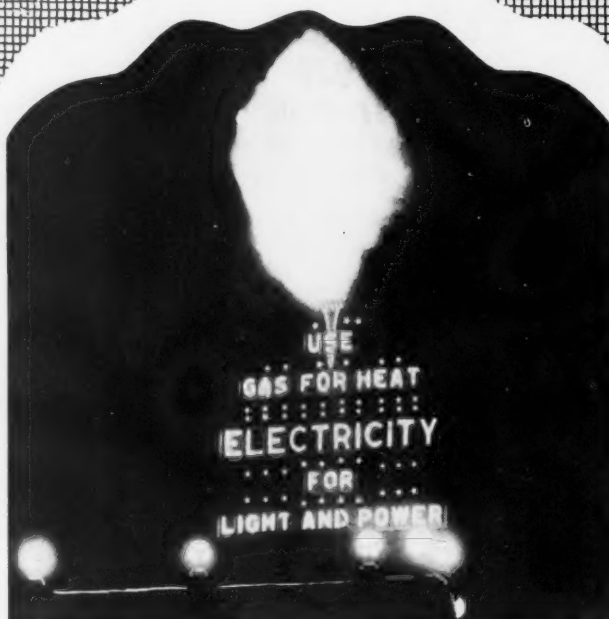
585-589 HUDSON STREET, NEW YORK

Awarded gold and silver medals at Panama-Pacific Exposition.





Effective electrical display sign installed for the Louisville (Ky.) Gas & Electric Co., by the Federal Sign System.



Federal signs have a reputation for original and striking display effects. Write for Bulletin No. 19, showing recent installations.

first sell yourself

In selling anything to the other fellow the first and fundamental step is to sell *yourself* on the proposition.

Show electric sign prospects that *you* are sold on the electric sign idea—that you believe it brings results—by using an electric sign *yourself*. Put a FEDERAL Electric Sign on office building or substation.

You will find it the most convincing sales-demonstration you can make.

FEDERAL electric signs

A design for a FEDERAL sign proportionate to your needs and with the striking distinction that marks FEDERAL designs, will be created for you by our experts and submitted to you, without obligation to accept. In addition, FEDERAL selling co-operation is ready with the

fullest aid at all times, to help you line up more sign business in your town.

You will be interested in seeing recent FEDERAL sign installations by Central Stations.

Write for Special Bulletin No. 10—*now*.

FEDERAL SIGN SYSTEM (Electric)

Lake and Desplaines Sts.
CHICAGO

627-649 W. 43rd St.
NEW YORK

618 Mission St.
SAN FRANCISCO

Four Factories

Branches in all the large cities



Electric Displays

What CENTURY
Originality—Quality—Service

is doing for the
Potomac Electric Power Company, Washington, D.C.
it will do for you.

Washington, D. C., March 3, 1917

Century Manufacturing Company, Inc.
Elizabethtown, Penna.

Attention: Mr. E. M. Miller, Sec. & Treas.

Gentlemen:-

We beg to express our appreciation to you for the quality and workmanship on the electric signs of your make, which have been erected in Washington.

In all cases they have proven very satisfactory, both to our customers and ourselves. Experience has shown us that an electric sign that is not properly constructed is very undesirable, as it not only makes a customer dissatisfied but his dissatisfaction has an unfavorable effect on prospective users of electric signs.

The Signs of the Century make have, in all cases, been boosters for us, and each sign you have placed here has been helpful to us in securing additional customers for electric advertising.

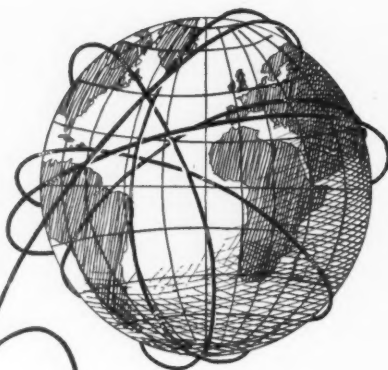
Our dealings with you have been most satisfactory and we expect our business in electric signs to increase very much during the present year.

Very respectfully yours,

POTOMAC ELECTRIC POWER CO.
By J. C. McLaughlin, Mgr. Comm. Dept.

The above letter is one of many from
our SATISFIED customers.

The Century Manufacturing Co., Inc.
Elizabethtown, Pa.



All over the World

—wherever electricity is serving the needs of man,

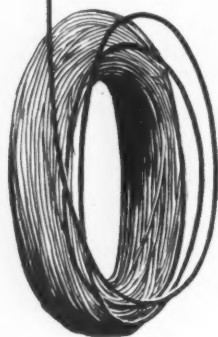
—here and abroad,

—from Alaska to the tip of South Africa,

HABIRSHAW

"Proven by the test of time"

Insulated Wire



is recognized as a standard, because of faithful service.

Dr. Habirshaw's pioneer work of 30 years ago has grown and spread into almost every corner of the globe.

In high or low tension work, underground, submarine, serial — everywhere — each Habirshaw installation has forged another link in the chain of Habirshaw reputation—

Proven by the Test of Time

Distributed by
Western Electric Company
INCORPORATED
Service
Offices in all principal cities.



Manufactured by
THE HABIRSHAW
ELECTRIC CABLE CO., Inc.
10 E. 43rd St., New York



Unveil the Mystery of the Socket for Your Customer

Remember that the average man and woman who are the buyers and users of electrical fixtures and equipment and who put up the money for electrical installations are not electricians. If left to themselves they naturally are impressed by and appreciate only what they see.

Their confidence and faith in you and consequently in

the value of what you are trying to sell to them is redoubled when you explain clearly so that they understand just why you do certain things in a certain way and why it is essential to do them this way to deliver the highest efficiency.

When you tell your customer that you make a point of furnishing

P & S Sockets



explain the function of a socket. Why quality is necessary. The inconvenience or even possible danger of a cracked or broken socket. The amount of work that a socket is called on to perform in a very few years. The average man will be astonished when you explain that the average socket is called on for from 3 to 4 thousand operations a year. And he will clearly appreciate the necessity of quality when you explain that the socket is "the Gateway of Electric Service."

He will have more respect for you and your goods. Incidentally he will have much less concern about prices.

That's salesmanship. Show the customer the goods and make him appreciate their value.

Our booklet "The Gateway of Electric Service" will be of help in doing this. A copy of it is at your service.

Pass & Seymour, Inc.

Solvay, N. Y.

POSITIVE DRIVES

THERE can be no slip in the Link-Belt Silent Chain Drive—the chain meshes into the gear, engaging more teeth than in a gear drive, as may be seen by the illustration. All the power of the driver reaches the driven wheel, pulling the load with unyielding, yet resilient force.

LINK-BELT SILENT CHAIN DRIVES

are operating every conceivable kind of machinery. The drive is Flexible as a Belt—Positive as a Gear—More Efficient than Either. The success of Link-Belt Silent Chain is due to its patented Pin-Bushed-Joint construction—a round pin and two case-hardened semi-circular bushings—found in no other chain. Write for 112-page price list Data Book No. 125.

LINK-BELT COMPANY

PHILADELPHIA

New York . . . 299 Broadway
Boston . . . 49 Federal St.
Pittsburgh . . . 1501 Park Bldg.
St. Louis, Central Nat'l Bank Bldg.
Buffalo . . . 638 Elliott Square
Cleveland . . . 1304 Rockefeller Bldg.
Detroit . . . 732 Dime Bank Bldg.
Wilkes-Barre . . . 24 Nat. Bk. Bldg.
Minneapolis . . . 418 So. Third St.
Louisville, F. Wehle, Starks Bldg.
Seattle . . . 580 First Ave., S.
Portland, Ore., 14th & Lovejoy Sts.

CHICAGO

Knoxville, . . . Empire Bldg.
Birmingham, D. T. Blakey, 309 Am.
Trust Bldg.
Los Angeles, 161 N. Los Angeles St.
Denver, Lindrooth, Shubart & Co.,
Boston Bldg.
San Francisco, . . . 461 Market Street
New Orleans, Whitney Supply
Co., 418 So. Peters St.
Charlotte, N.C., J. S. Cothran,
Commercial Bank Bldg.
Toronto, Canadian Link-Belt Co., Ltd.

INDIANAPOLIS

Acme-Evans Company
Indianapolis, Indiana

April 20, 1916.

Link-Belt Company,
Indianapolis, Indiana
Gentlemen:—Regarding the results we
are receiving from our Link-Belt Silent
Chain Drive, will say we have been run-
ning the 20-inch chain on a 300 H. P.
motor for about 10 months. Up to this
time, we are pleased to say the drive
has given us entire satisfaction, not even
a moment's delay. We also have an 8-
inch chain running on a 50 H. P. motor.
This chain is also satisfactory.

Yours very truly,
ACME-EVANS COMPANY.

(Signed) Jas. E. Nichols, Supt.

Read what one user
thinks of Link-Belt
Silent Chain:



7 Big Selling Points

that are Creating Demand



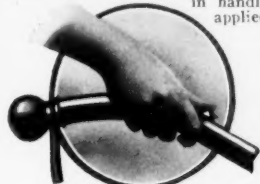
We mention only *seven* of the big selling advantages of the EUREKA Vacuum Cleaner. BUT you'll notice that every one of those *seven* is a real, genuine selling point that you KNOW can move the goods when pointed out by a live dealer. AND there's a lot more than seven, but we haven't space here to tell 'em. FURTHERMORE, there's a good PROFIT in it for you—and we give you helps that HELP. Get DETAILS.

**Eureka Vacuum
Cleaner Company**
Detroit, Michigan

The
EUREKA
**VACUUM
CLEANER**

Licensed
under
Kenney Patent
847,947

Exclusive Button Switch Control
On the Eureka the electricity is controlled by a button switch. The operator simply presses button (located on the curve of the handle) lightly forward to start the machine and lightly backward to shut off current. Note illustration how switch is enclosed in handle. (Patent applied for.)



BUTTON SWITCH

The Curve in the Handle

Ease of operation is one of the important features of the Eureka. The curve in the handle which fits the natural position of the hand makes this possible. Also note the protection knob which prevents unnecessary wear on the cord.

The Eureka Floor Brush

One of the prominent patented selling features of the Eureka is the detachable floor brush—can be easily adjusted to the nozzle in a second's time. While the bristles loosen fine particles which become fastened in the nap of the carpet, the strong powerful suction of the machine carries them quickly to the bag. The Eureka can be used with or without this attachment.



DETACHABLE FLOOR
BRUSH

Large Dust Bag

The Eureka dust bag is of special design with side funnel which prevents the churning of dirt taken into the bag. The bag holds a large quantity of dust and is very simple to remove and replace.

The Eureka Handle Lock

Locking the handle in a rigid upright as well as low position is an exclusive feature found only on the Eureka. The lock is made of steel—very durable—highly nicked—will never break or get out of order. (Patent applied for.)



HANDLE LOCK

The Wide Floor Nozzle

The cleaning nozzle is 12 inches wide and cleans a very large space with every stroke of the machine. No matter at what angle the handle is held the nozzle always keeps the proper position on the floor.

The Hose Attachment Feature

The connection of the hose attachment to the Eureka is marvelously simple and easy. In just 10 seconds the change can be made from cleaning carpets to cleaning mattresses, furniture, etc. There is nothing to screw on or take off. The cleaning nozzle folds under the machine when hose is used. This is an exclusive Eureka feature and is covered by patents.



FOLDING NOZZLE

Awarded "Grand Prize" highest award for Electric Vacuum Cleaners at the Panama-Pacific International Exposition, San Francisco

The Eden

LINE

Built on an accurate knowledge of the science of separating all the dirt from clothes without rubbing, beating, paddling, tearing or straining the fabric.

Built to preserve clothes as well as to wash them. Built to last longest as well as to serve best. Built to conserve economy, save labor and increase comfort in the household.

Built by manufacturers whose sole business is concentrated in the building of labor-saving household appliances—not a by-product or a side product of a gen-

eral manufacturing business, but a main product. That's why every EDEN sold sells another and why no EDEN ever comes back.

Write in today for particulars about the EDEN line and special EDEN Agency proposition that relieves you of all work and responsibility in connection with your time-payment sales.

Big national EDEN advertising campaign. Dealer tie-ups and helps furnished free—cuts and plates for local newspaper advertisements, folders, stuffers, cut-outs, hangers, store and window cards, etc. Write Dep't. W.

Brokaw-Eden Mfg. Co., Alton, Ill.



Talk about making profits on your sales persons

During the month of October, one central station made a special effort on Hoover Suction Sweepers. Over \$15,000 worth of Hoovers were sold during the month—and here are the records of some of the salesmen:

One representative	sold	52	Hoovers	in	30	days.
A second	"	"	39	"	"	"
A third	"	"	32	"	"	"

And so it went. All the way down through the sales force a splendid business was turned in on Hoovers. A gross profit was earned for the house by each salesman ranging from \$200 to \$900 ON JUST HOOVERS ALONE, in just the one month. Total profits amounted to \$5,000. Going some!

The Hoover Suction Sweeper will make money for you, just as fast and in as big volume, as it is making it for other central stations. It's just a question of *organized effort*. The Hoover will come close to *selling itself*, if you just see that it is demonstrated before the proper parties.

We'll be glad to tell you how the dealers who are making a big clean-up on the Hoover go about it to get every person in their organizations on their toes and enthusiastically *after business* on the Hoover. Just send the coupon. We'll do the rest.

THE HOOVER SUCTION SWEEPER



Electrically
Driven
Brush of
Soft Hair

Sending the coupon will bring you information worth a good many dollars, yet it costs you only the time to fill it in, and the stamp that brings your name to us.

The Hoover Suction Sweeper Co.
Box 902, New Berlin, Ohio

The Hoover Suction Sweeper Co.,
Box 902, New Berlin, Ohio

Gentlemen:—

Please send us full information as to how to conduct a special selling effort on Hoover along lines that have been used with great success by other central stations.

Name

Address in full.....



Here is the new name of an old established product—The OHIO Electric Cleaner.

Now you know the name of our product.

Next month—Watch this space and see the *NEW* product itself.

Meanwhile—don't wait to see next month's ad—write and get the good news in advance!

Full description and dealers proposition are ready to mail!

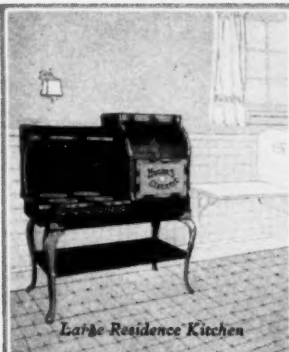
The United Electric Company

Canton, Ohio

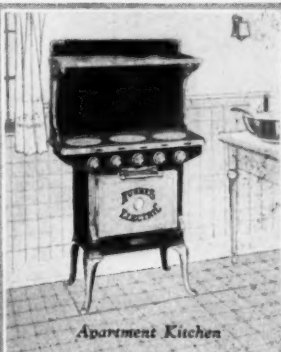
HUGHES

ELECTRIC RANGES

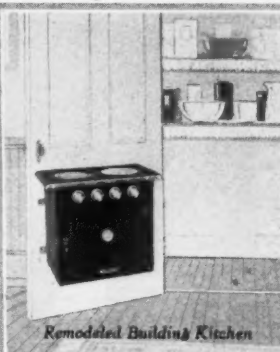
a TYPE for every KITCHEN
in every TYPE of HOME



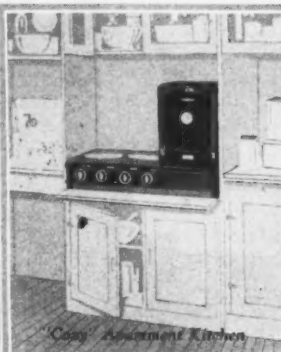
Large Residence Kitchen



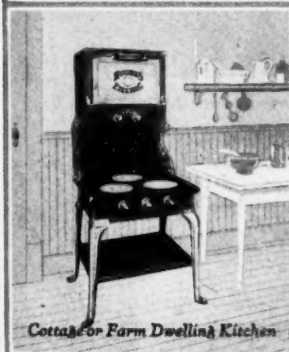
Apartment Kitchen



Remodeled Building Kitchen



Cozy Apartment Kitchen



Cottage or Farm Dwelling Kitchen



TODAY it's a question of selecting the proper type range that will satisfactorily and economically serve each housewife's particular range need.

There's a Hughes Electric Range designed to meet every requirement in your community, regardless of the size of household and kitchen. Whether for the large residence, the six or seven room apartment, the remodeled building, the "cozy" one or two room apartment, the cottage or farm dwelling kitchen, there is a Hughes Electric Range perfectly suited for the purpose.

We are well equipped to serve Central Stations with the largest and most complete line of Electric Ranges on the market today—a type for every kitchen in every type of home.

HUGHES ELECTRIC HEATING CO
5660 TAYLOR STREET, CHICAGO
Toronto Winnipeg Boston



"Daisy Dayload" is The National Electric Range Magazine published gratis by us every other month for every Electric Range Salesman in America. Are you receiving it?

The **DUMORE MODEL-3**

Stronger Selling Features Better — Profits



"IT'S the most practical sewing machine motor we have ever seen, and you can depend on us to push it hard." That's what one dealer says about the DUMORE Model 3, and other dealers are equally enthusiastic.

It's easy to understand this warm attitude, this hearty support, when you see how the DUMORE is built and how efficiently it operates. Its many advantages make it a big seller—a favorite with the trade. Costs you no more than less efficient motors and gives you a bigger profit.

Let us send you a DUMORE on approval. Display it prominently and demonstrate it to your customers. Keep it 30 days, and if you're not satisfied with sales ship it back *at our expense*. Literature on request.

Advantages of The DUMORE

Attaches quickly and firmly—fits any machine.

Runs at six different speeds and can be instantly reversed.

Lowers with head into the cabinet.

Universal motor—takes power from any lamp socket.

WISCONSIN ELECTRIC CO.,

**2601 DUMORE BLDG
RACINE, WISCONSIN**

**STERN
TELEGRAM**
NEWSPAPER CARLTON PRESS

Cleveland, O., Feb. 27-17.

to the terms
of the telegram

ton Light Heat & Power Co.,
Main St.,
Canton, Ill.

WE WILL SELL TWO HUNDRED TWENTY FRANTZ PREMIER ELECTRIC CLEANERS
FOR YOU IN A MARCH CAMPAIGN. WE WILL FURNISH EXPERT HIGH GRADE
SALESMEN. YOU ONLY PAY THEM COMMISSION ON ACTUAL APPROVED SALES.
YOU BUY MACHINES ON YOUR LINES AND YOU ALSO GET GOOD MERCHANDISING
PROFIT. WE GUARANTEE YOU WILL NOT BE STOCKED UP WITH CLEANERS.
KINDLY TELEGRAPH US OUR EXPENSE IF SATISFACTORY FOR OUR FACTORY
REPRESENTATIVE TO CALL AND EXPLAIN FULL DETAILS OF PROPOSITION.

THE FRANTZ PREMIER COMPANY

A Big Part of Frantz Service is Selling Them For You —We Know How

That is why a Frantz Premier Electric Cleaner Campaign for you during April is bound to be a big success.

A success from the standpoint of MERCHANDISING PROFIT — of ADDITIONAL REVENUE—of ABSOLUTE SATISFACTION on the part of your customers.

Frantz Service means to the Central Station that we not only sell you Frantz Premier cleaners at a price that allows you a good merchandising profit, but, better still, we furnish you with the necessary high grade, clean-cut, specially trained salesmen—men who are capable of making twenty-five and thirty sales per month under ordinary conditions.

The Frantz Central Station Campaign is part of the FRANTZ SERVICE. The two go hand in hand.

A Frantz Campaign for you in April means—a cleaner as good as the World's largest cleaner manufacturers know how to turn out, backed by a real guarantee and a service that insures permanent satisfaction on the part of every one of your customers—and best of all it means the sale of from 50 to 500 of these dependable cleaners in your city, in thirty days' time depending on the number of light users on your lines. AND we guarantee you will not be stocked with machines.

WE SELL THEM FOR YOU—not stock you with them.

Read carefully the telegram, reproduced above, sent out from our Chicago office the other day, and which is resulting in one of the largest Central Station campaigns that will be launched this Spring.

We make you the same, identical proposition. You cannot afford to overlook this tremendous opportunity. Act at once. We can operate only a limited number of campaigns in the next sixty days.

Wire us at our expense that you are interested and we will explain the proposition in detail. Quick action is necessary if you want the campaign during April, the best cleaner month of the year. Our supply of live-wire salesmen is limited. Wire immediately, therefore, or you may be just too late.

The Frantz Premier Co., Cleveland

INTERCHANGEABILITY

E
C
O
N
O
M
Y



No. 3000 with Reflector No. 514



Top No. 3000

For use with
small types—
Bowls
Angles
Domes

Popular because Profitable

—practical—handy—efficient.

These rightly called

**“EFFICIENCY”
UNITS**

are popular with the electrical trade because they render well-appreciated good service to the user—because they *simplify* the problem of meeting the consumer's need—because they greatly *reduce* the reflector investment of the contractor and dealer. Get our Reflector Handbook No. 10.

The
Burr Mfg. Co.
Cleveland, Ohio

The
A. B. Wilson Co.
Central Sales Agents
Leader-News Bldg., Cleveland
New York Office and Stock, 114 Liberty Street
Philadelphia Office, Bulletin Bldg.
Chicago Office and Stock, 618 W. Jackson Blvd.
St. Louis Office and Stock, 1515 Pine St.

Q
U
A
L
I
T
Y

SIMPLICITY

Snover Loom Fasteners

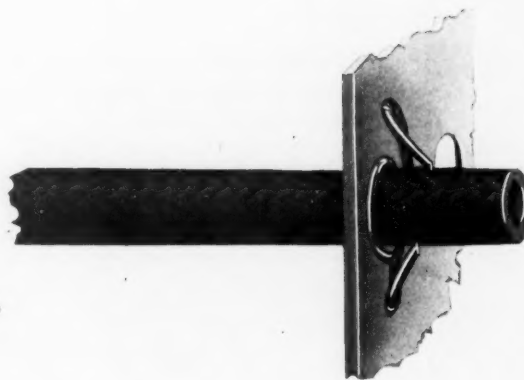
Grip the loom firmly and positively with this fully approved device. Nothing to adjust—installation perfectly made in an instant. Endorsed by the Underwriters' Laboratories as a safety device and by the trade as a time saver in all loom work.

Pull the fastened loom to the breaking point—it cannot slip and the fastener

**Cannot
Pull Through**

Amplly proportioned for perfect work on any box opening. Cannot damage the loom lining. Write for details and quotations.

Never Slip—



The A. B. Wilson Co.

General Sales Agents
Leader-News Bldg.

Cleveland



This New Book Will Help You to Do More Wiring in Less Time

Every man who has electrical wiring to do is pretty sure to find this book a big time- and worry-saver.

At one stroke it does away with the great difficulty many wiremen have in following closely the requirements of the National Electrical Code and, at the same time, doing their work quickly.

For this book tells you, in short order, just

what the Code requires and exactly how to meet those requirements.

This is taken care of by a logical arrangement of the material and an exceptionally complete system of indexing. It means that you can instantly place your finger on just the fact you want. The result is a big reduction in the time you have to spend on any one job.

This will enable you to do more wiring—and do it in less time.

Ready Early in April

Wiring for Light and Power

By Terrell Croft, author "American Electricians' Handbook" and "Wiring of Finished Buildings."
440 pages, flexible binding, pocket size, \$2.00 net, postpaid.

This is a real wiring handbook—
That fits the requirements of the National Code.
That conforms to the best American practice.
That is indexed so that you can find instantly the facts you need.

That is plainly worded, so that anyone who can read English can understand it.

That is fully illustrated, so that the right way to do a job can be grasped promptly.

That is, besides, a common-sense, practical commentary on the National Electrical Code.

That tells how to install wiring and apparatus for practically all services, under practically all conditions.

That tells how to install these so as to be electrically safe and mechanically correct.

That explains why installations should be made in a given way.

Send No Money—Just the Coupon

We do not ask you to buy this book—or even to agree to buy it—until you have examined it thoroughly and assured yourself that it is going to be a real time-saver.

Fill in and mail the coupon today. Send no money—nothing but the coupon.

McGraw-Hill Book Co., Inc.

239 WEST 39TH STREET, NEW YORK

LONDON: HILL PUBLISHING CO., LTD.
6 & 8 BOUVERIE ST., E.C.

Publishers of Books for Electrical Merchandising.

FREE EXAMINATION COUPON

McGraw-Hill Book Co., Inc.,
239 West 39th Street, New York, N. Y.

You may send me on 10 days' approval:

Croft—Wiring for Light and Power, \$2.00 net.

I agree to pay for the book or return it postpaid within 10 days of receipt.

If a regular subscriber to Electrical Merchandising, check here ☐

(Signed)

(Address)

Reference E.M. Mar.

(Not required of subscribers to Electrical Merchandising. Books sent on approval to retail customers in the U. S. and Canada only.)



Floodlight the Flag

Right now, when patriotic sentiment is running high and everyone is displaying Old Glory, *floodlighting the flag* offers you a big opportunity. It's an idea that will win.

To insure satisfactory results use the X-RAY Projector. It contains an X-Ray reflector—the most powerful and only permanently efficient reflector made. Throws a 67,750 candlepower beam hundreds of feet with a 200-watt Mazda lamp.

Accessible—easily installed and regulated—compact—weatherproof—perfectly ventilated.

Floodlighting buildings, signs, night gangs, sports, industrial plants, etc., is a big, profitable and undeveloped field. Our engineers and service department will gladly co-operate to help you land more of this good business.

Valuable Book on Floodlighting FREE

Tells the possibilities for you in this newest development in lighting. Packed with practical data. Write for it today.

NATIONAL X-RAY REFLECTOR CO.

237 W. Jackson Blvd., Chicago 14 W. 46th St., New York



Order Your SHELTON VIBRATOR Today



Used in the Best Barber Shops

Where they are on duty twelve hours a day every working day of the year.

It takes *quality* to stand service like that! Will the Vibrator line you handle stand this service? If not, are you safe in selling them to your customers?

Here's a few of the finest New York barber shops using Shelton Vibrators and Hair Dryers—

Hotel Biltmore
Belmont Hotel
Manhattan Hotel
Hotel Astor
Hotel Martintique
McAlpin Hotel
Vanderbilt Hotel

St. Regis Hotel
Fleischmann Baths
Grand Central Terminal
Hudson Terminal
Equitable Building
Woolworth Building
Singer Building

**The line sells from \$16.50 (retail)
and up**

You should sell SHELTONS

SHELTON ELECTRIC CO.

Factory: Fort Wayne, Indiana, U. S. A.

New York Boston
30 East Forty-second St. 101 Tremont St.
San Francisco
62 Post St.

A Good Article to Have on Display During "Wire Your Home Time"

April 1st to May 15th

The Pittsburgh F. A. Electric Cleaner

Just put a sign in the window calling attention to its features and it will sell itself.



- 1 Fourteen-inch nozzle.
- 2 Revolving brush to take up ravelings, thread, hair etc.
- 3 Four large rubber rollers for easy movement.
- 4 Case made of aluminum, light and strong.
- 5 High grade universal motor, good for either alternating or direct current circuits.
- 6 Large opening to receive dirt.
- 7 Large air chamber.
- 8 Dust bag has large capacity and is easy to empty.

It's the big cleaner value of the day and it's a fast seller everywhere. Price \$22.50. Good profit.

It's one of the big reasons for having the house wired.

"Wire Your Home Time" will greatly increase the demand for it. We are prepared to make prompt shipments. Just wire how many.

Pittsburgh Electric Specialties Co.
Pittsburgh, Pa.

One Mazda Lamp Is Like Another But—



It isn't just the mere lamp that wins the new accounts and builds up the agent's lamp business. It is the lamp *plus* service, *plus* good advertising. That's why we say sell

FRANKLIN Mazda Lamps

For when you sell the Franklin Mazda you have a lamp that satisfies the business man for *Quality* and a lamp that holds your customers and makes them friends by *Service*. And we help you constantly to win new customers, new friends, new permanent and profitable accounts.

Don't make new arrangements for your Supply of Lamps until you talk to us. Better write to-day while it is on your mind.

The Franklin Electric Mfg. Co.
Hartford, Conn.

Remember—
The Name of Franklin
Helps You Sell.....



Be Ready

for that rush order. Be prepared to maintain your own service reputation. Our Catalog S-3 and supplement show the fixtures which we can ship on

24 Hours' Notice

Don't Neglect

to take advantage of the Engineering service which we offer. Remember, our ability to handle special designs and difficult estimates on big jobs has obtained many contracts for other dealers and will do as much for you.

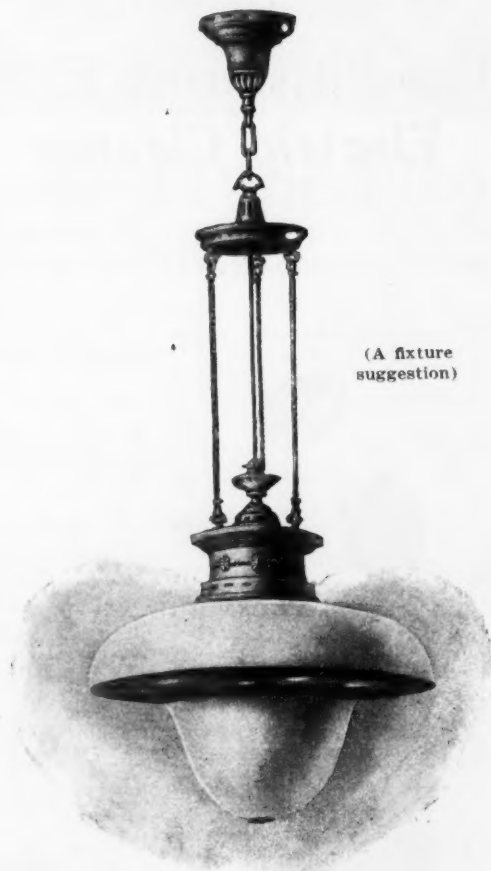
DENZAR



Beardslee Chandelier Mfg. Co.
221 South Jefferson Street
Chicago, Ill.

A Distinctive New Feature

in "semi-indirects"



(A fixture suggestion)

Phoenixlite
11812

(Patented)

A one-piece unit. The upper and lower reflectors being finished in dense white enamel combine in directing the light downward and outward through the CLEAR glass band which lies between.

This new feature produces a highly efficient and glareless unit which is dustproof and bugproof.

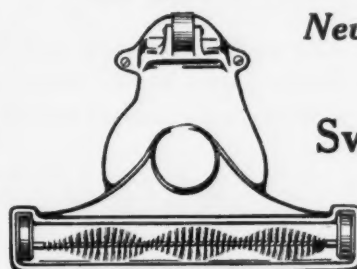
A profitable feature is that it *sells itself*.

Send for the 11812 booklet.

The Phoenix Glass Co.

New York
Pittsburgh

Chicago
Boston



See that Revolving Brush. Gear
Driven. 12½ Inch Nozzle

The Simplex Electric Cleaner

*New Model Now Ready
Cleaner and
Sweeper Combined*

Still Popular Priced
Quick Seller

*We Have Some Valuable
Territory Yet Unassigned*

We have promised the trade that our 1917 Model Simplex would be our best seller. Let us prove it by sending sample on 30 days approval.

THE RAMEY MFG. CO.

COLUMBUS

OHIO

**Strong
Profit
Points**

of the

“American Beauty Iron”

THE BEST IRON MADE



Its easy selling qualities—made possible by its superior mechanical construction, its pleasing and attractive appearance and the fact of its being universally known as the “Best Iron Made”—tend to make for quick stock turning and quick stock turning is the source of quick profits. Certainly this interests you? Let us tell you about them and put you on

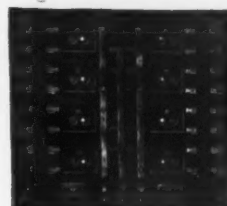
The road to more profit

We make a varied line of electric household and industrial devices. May we send you an illustrated price list and discounts?

**American Electrical Heater Company
Detroit, U. S. A.**

Oldest and Largest Makers in the World

**“Circle
T”**



For Push Switches

Standard Panels

(For N. E. C. and plug fuses. Knife, snap or push switches.)

If contractors would only consult our *STANDARD PANEL* lists they would find many opportunities to eliminate Special Boards.

Special Panels take longer to build—cost more and are no better than *STANDARD TYPES*.

Through feed panels can be eliminated by tapping off the mains to the Terminal lugs of a *STANDARD PANEL*.

Consult our Standard Panels and Cabinets, pages 94-155, catalog No. 10.

**The Trumbull Electric Mfg. Co.
Plainville, Conn.**

New York Boston Philadelphia Chicago San Francisco

The Reflectors of Utility and Value!

ABOLITES



Holder Socket, Dome Type
Abolite



Shade Holder, Dome Type
Abolite

The porcelain-enameled reflectors that make good with users, engineers and architects, contractors and jobbers

Abolites always lead for best and uniform results. Low maintenance cost for both lamps and reflectors.

The Abolite line is complete and of A-B make throughout. Each unit possesses all desirable characteristics in the best proportionate degree.

And now Abolites are porcelain enameled in our own new vitreous enameling plant. Our increased facilities mean better product and service.

Have you a copy of Catalogue 137-A?



Holder Socket, Bowl Type
Abolite



Holder Socket,
Diagonal Type
Abolite

The Adams-Bagnall Electric Co., Cleveland, Ohio

Manufacturers of
Electrical Apparatus with both
Merchandising and Engineering Merit

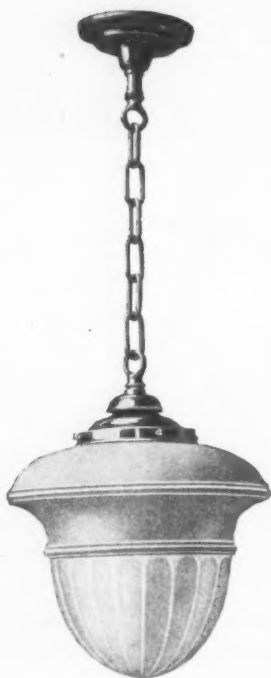
Industrial, Commercial and Street Lighting Equipment;
Distributing Power and Constant-Current Transformers;
Gyrofans; Oscillating Fans; Auto Electrical Accessories

Write now for data or quotation on your requirements!

REGENT GLASS WARE



A NEW UNIT FOR STORE LIGHTING

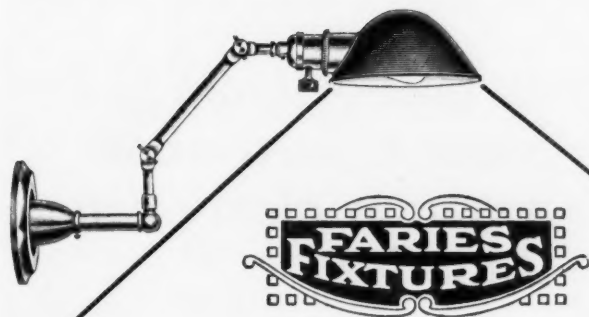


THE tendency in store lighting today is toward large, imposing units. The attractive No. 01414 shown here is designed to meet this demand. It is 14 inches in diameter, and is made of our white Yural glass. The globe is simple in design, gives a well-diffused illumination, and will look well in almost any scheme of interior decoration. It is completely enclosing, and should be used with 300, 400, or 500-watt lamps.

IVANHOE-REGENT WORKS

of General Electric Co.
CLEVELAND, OHIO

For all Canadian business refer to
Canadian General Electric Co., Limited, Toronto, Ont.



CATALOG No. 24

is complete in every detail. From it you can choose the many units you'll need for your room and window displays. With it for a reference you can satisfy any customer's demands.

Adjustable Portables for Office Use

Step into a few offices near your shop. Notice how the desks are lighted. You'll find that good desk illumination is the exception, *not the rule*.

Here's a market that should be cultivated intensively—it's alive with prospects. The business comes easy and every installation comes before the eyes of thousands of prospects.

Stock up with Faries Fixtures and go after your share. To sell them, simply show them.

FARIES MFG. CO., Decatur, Ill.

Faries-Lighted Desks



"VANCO BRONZE"

A recent development of importance to the lighting industry—backed by a manufacturer having fifty years' experience in combining art and metal into lighting fixtures.

Our staff of designers, notable as artists on Mitchell Vance fixtures, understand the art of creating effects.

Vanco Bronze is produced at a comparatively low cost because this metal results in practically perfect pieces. No flaws to be patched, no high cost to prepare the surface for finish—a minimum of hand work.

In weight, durability and adaptability to modeling Vanco Bronze, while similar in many respects, is superior to the metals used in the past.



Vanco Bronze lighting fixtures will be handled by dealers in good standing, one in each locality, and every dealer throughout the country will find it to his advantage to take on this profitable, design patent protected line.

The value of design patents is receiving an increasing appreciation. A dealer bidding, therefore, on Vanco Bronze fixtures is not subject to the

usual competition.

Vanco Bronze is furnished not only in the standard finishes but in many new and beautiful effects that have not heretofore been possible.

Delivery service is of the utmost importance. We will deliver any quantity in one week—just think of it!

THE MITCHELL VANCE CO.

Factory:
503-11 W. 24th Street
Near 10th Ave.

NEW YORK

Showrooms:
294 Madison Ave. at 41st St.
One block from Grand Central Station

The Torrington ELECTRIC VAC

Made by
one of the
largest
makers of
sweepers in
the world.

WE KNOW
HOW!



is going to be the most talked-about vacuum cleaner in America!

Because, in our 17 years' experience in making sweepers and cleaners, we have learned the demand—we have designed and built a vacuum cleaner that *meets* the demand—and we are now *spreading the news* about this cleaner in millions of issues of popular magazines.

The Ladies' Home Journal, the Delineator, the Designer, Good Housekeeping, Woman's Magazine—THESE are the papers that are going to send the people into your store. Now listen. When you consider that the Torrington isn't cheaply built—that it has a G-E MOTOR, a genuine *carpet-sweeper brush*, a *nozzle* that gets into nooks and corners, you begin to realize what there is in it for you. NOW, while the demand is piling up, is the time to get in touch with us. Let us show you details—we're certain the rest will follow—and that means profits.

NATIONAL SWEEPER CO.

190 Laurel Street
TORRINGTON, CONN.

**Here's something brand new
that will sell itself from your
counter with a long profit to you
and no come-backs.**

MARVELITE buttons are made with real Radium—and everybody is interested in owning a little Radium. These buttons can be glued onto switch buttons or screwed onto switch plates. They give a soft mellow glow that makes it possible to find the switch button in the blackest darkness without the least trouble. Or they can be glued onto suspended lights and do away with "pawing the air" to find them.

There's a dozen other uses for these buttons in every home, office, store, factory or warehouse; sell one set and it will sell a dozen more. Retail price \$1 per set, with plenty of profit for you and a very attractive sales card to get the public's attention.

Backed by a good reliable company, advertising in *The Saturday Evening Post* and entirely out of the trinket class.

Let us send you our proposition; good dealers wanted everywhere. Exclusive rights possible.

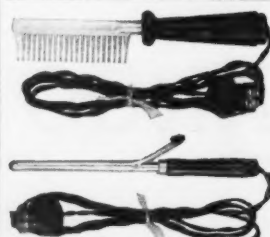


Trademark

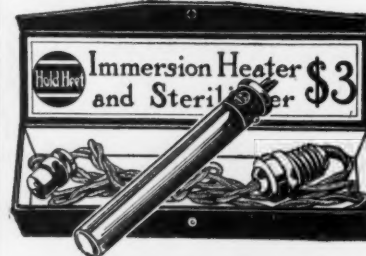
Cold Light Mfg. Co.

Commercial subsidiary of the
Schlesinger Radium Co.

820 Chamber of Commerce
DENVER, COLORADO



Comb \$3. Curling Iron \$3.



660 Watt \$6.00 1500 Watt \$8.00
1000 Watt 7.00 2000 Watt 10.00

MAKE MONEY

Our line of guaranteed high grade heaters are priced right. They make you a good margin and they retail at popular prices.

Dealers Prices

Comb	\$1.66
Curling Iron.	1.66
Immersion Heater	2.00
660 Watt Radiator...	4.00
1000 Watt Radiator...	4.66
1500 Watt Radiator...	5.33
2000 Watt Radiator...	6.66
Toaster Stove	1.66
6 Cup Percolator.....	3.66
6" Disc Stove	3.00
Vertical Toaster....	2.16

We also manufacture Hold-Heat Pads, Blankets, Soldering Irons, Glue Pots, Fans, Auto Heaters, etc. Jobbers and Dealers write for full details of our proposition.

**Russell
Electric Co.**
140 W. Austin Ave.
Chicago, Ill.

ROYAL
QUALITY SERVICE
ELECTRIC CLEANERS

THE rapidly spreading knowledge of Royal quality and Royal factory co-operation has created an unheard of situation in the electric cleaner business—it has developed a demand for Royal Cleaners which has temporarily exceeded our factory facilities, despite the fact that they have been doubled during the past three months.

For the spring season our entire output has been contracted for. We cannot take on any new dealers without a sacrifice of Royal Quality and Service—something we will never do.

Naturally—we want all the dealers we can get—but we do not want more than we can serve well. Present Royal Dealers will receive the full limit of Royal Intensified Service and Co-operation. For the fall season we will be prepared to fill the requirements of the many dealers who now recognize the money making possibilities of Royal Cleaners.

The P. A. Geier Co., 5121 St. Clair Ave.,
Cleveland, Ohio



Full load to full speed in 2 to 10 seconds—

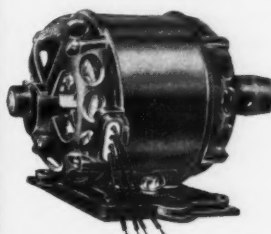
this quick acceleration minimizes the drag on the circuit and together with the low starting current permits of the 1/10 to 1/4 horse power

Century

Repulsion Start—Induction

SINGLE PHASE MOTORS

being installed on lighting circuits.



Illustrating a 1/6 hp. motor

A fuse which will protect under full load is usually of ample capacity for successfully starting the ordinary full load.

Other sizes up to 40 H.P.—25 to 140 Cycles.

THEY-KEEP-A-RUNNING

CENTURY ELECTRIC COMPANY

19th, Pine to Olive Streets St. Louis, Mo., U.S.A.

Sales Offices in Principal Cities

246

*“Merchandise
Well Displayed
is Half Sold”*

Employ
D. & S.
Background Papers
(Not Crepe Paper)
in arranging your
Window Displays

Special EASTER items ready for immediate delivery.

Your name will be put on our mailing list at your request. Read page 35 of the February issue and avail yourself of our free offer.

DEPT. K

Doty & Scrimgeour Sales Co., Inc.
74 Duane Street New York

TESTS

ELECTRICAL TESTING LABORATORIES

80th Street and East End Avenue

New York, N. Y.

BRASCOLITE

DIFFUSION PLUS REFLECTION



The Nationally Advertised Lighting Fixture

There is an unusual opportunity for the electrical dealer and contractor to associate his store with the national campaign which is making the Brascolite an article of daily demand.

There is a liberal margin of profit. The fixture comes to the dealer a complete unit in cartons. There is no assembling or wiring to be done. It is easily and quickly hung. A letter to us or your jobber will get you full information.

Luminous Unit Co.

St. Louis, Mo.

NEW YORK
30 Church St.

BOSTON
223 Old South Bldg.

SAN FRANCISCO
639 Market St.

CHICAGO
19 S. Fifth Ave.
PHILADELPHIA
1020 Land Title Bldg.

"UNION" ELECTRICAL PROTECTING MATERIAL

A Good Fuse is like Reliable Insurance, not an Expense but an Investment, and proves itself so in time of need by giving the protection paid for.



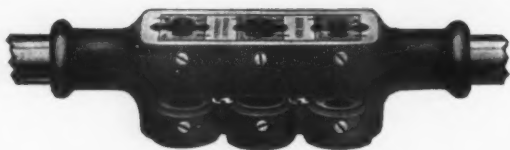
"Union" Fuses are made to safely carry their specified load but to promptly and safely open the circuit when the prescribed overload is reached. Opening on less current would be a needless expense to the user, and requiring more would rob him of the protection that he has a right to expect for his apparatus.

Write for Catalog No. 28

CHICAGO FUSE MFG. CO.

CHICAGO NEW YORK

For Conduit Threading



The TRIO Die Stock

Save your time and patience by having all your dies in *one* stock. No loose dies or parts to hunt up and assemble.

The TRIO contains three cutting sizes of Little Giant pipe dies all adjusted ready to use.



Greenfield Tap and Die Corporation

Greenfield, Mass.

New York Chicago
Galt, Ont., Canada



Send for No. 37 Catalog
of Screw Cutting Tools

SAFER!

If Etch-O-Lite had no other advantage over all other methods and material for frosting lamps save that it is safe, it still would lead the field.

But it is not only safer—

**It is Cheaper—
Quicker—
More Efficient—
Easily Handled—**



Order a trial lot of Etch-O-Lite today—use it—test it—you'll buy more, sure. In 5-lb. and 10-lb. containers.

Union Electric Company

Sole Selling Agents for United States

Terminal Warehouses, Pittsburgh, Pa.

Canadian Sales Agents, Northern Electric Company LIMITED

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FOR SALE

Stock Taking Time

Now is the time to turn the surplus stock of metals you have on hand into cash. We buy all grades of scrap metals, small lots as well as large lots. Write us today and tell us what you have and we will be pleased to quote you prices. National Metal & Rubber Company, 30-31 India Wharf, Boston, Mass.

Beware of the Junk Pile

The junk pile is the last resort—a little For Sale ad in this Searchlight Section should be the first and most profitable means of getting money for used equipment. An investment of \$1.50 may bring you some real returns. It has done this for others.

POSITIONS WANTED

Manager Electric Range Department

Thoroughly experienced electric range specialist wants connection with progressive central station. I wish to have full charge of selling and maintenance of range department. Will build up satisfactory business consistently and profitably. If you want an energetic young man, 29 years of age, with high grade specialty selling experience, write at once Box 42, Elec. Merchandising, Old Colony Bldg., Chicago, Ill.

BUSINESS OPPORTUNITIES

Established Business for Sale

The best electric wiring and fixture shop in Milwaukee. Established 20 years; large trade in city and state. Other interests demand our attention. Will sell cheap. A great opportunity. Address Henry J. Wright, Apartment 5, 150 Biddle St., Milwaukee, Wis.

POSITIONS VACANT

Solicitor Wanted

A growing lighting and power company in the Middle East wants a young experienced man to take charge of its new business department. Must be familiar with all kinds of wiring and competent to supervise and install same, and be able to conduct range and lighting campaigns and keep a small wiring crew busy. Send references, photograph and state salary willing to start with, in first letter. Box 44, Elec. Merchandising, Real Estate Trust Bldg., Philadelphia, Pa.

Salesman Wanted

No. A1 salesman having sound knowledge of illuminating engineering wanted to sell efficient glassware in connection with lighting service. Important territories to be covered. Good income and commission on sales. Write, giving references and detail of previous experience. Box 43, Elec. Merchandising.

MISCELLANEOUS WANTS

Electricians and Armature Winders

Send \$1 for 14 blue prints of motor windings, 10 A.C., single, two and three phase and 4 D.C. or set of 20 A.C., 4 D.C. and 4 rotary converter drawings, \$1.60. Winding made easy. Martin Elec. Co., 329 Irvington Place, Denver, Col.

AGENTS AND SALESMEN

Agency Wanted for France

French office of Electrical Engineers, M. I. C. F. and M. S. I. E., desire to get into touch with U. S. A. manufacturers of electrical plant and appliances of all kinds with a view of representing them in France and Belgium; highest references. Address "Bureau Technique Industriel," 63 Rue des Bois de Colombes, La Garenne (Seine), près Paris.

Sign Salesmen Wanted

Real sign salesmen (not mere order takers) with ability to sketch at least in the rough and with imagination. Address, with references, Box 35, Elec. Merchandising, 501 Rialto Bldg., San Francisco, Cal.

Store Salesman Wanted

Retail electric store salesman in large Ohio City. Box 45, Elec. Merchandising, Old Colony Bldg., Chicago, Ill.

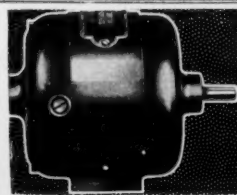
LIGHTING FIXTURES

for
Every Demand

You will find our line of lighting fixtures so extensive that you can install them, complete, without subjecting yourself to the cost, delay and irritation often incident to splitting up an order among several manufacturers.

Our Catalog No. 30 will give you an adequate idea of the breadth and character of our service.

E. P. GLEASON MFG. CO., 37-39 Murray Street, NEW YORK CITY



DUMORE Fractional H-P MOTORS
FROM 1/100 TO 1/6 HP-A HIGH-GRADE MOTOR.
For Every Purpose Universal Operates On AC or DC.
 WRITE FOR LITERATURE
Wisconsin Electric Co. 2500 Dumore Bldg. Racine Wis.

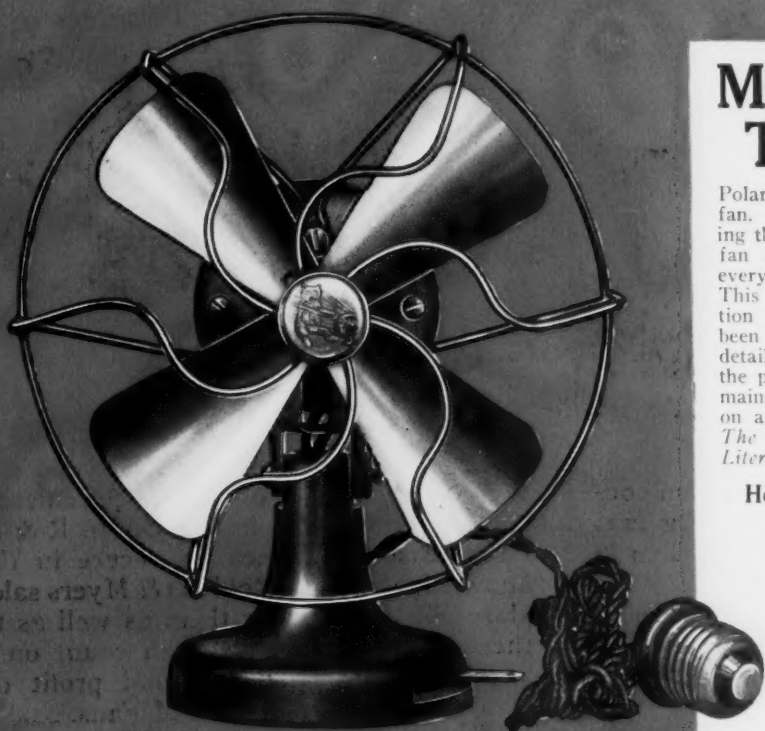
This is the Guide for the Buyer in the Market for Electrical Merchandise

Those concerns which advertise in Electrical Merchandising put their products in the Spot-light of Publicity and live up to the claims they make. They are listed below.

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Western Electric Co.</p> <p>Books, Electrical and Technical.
McGraw-Hill Book Co.</p> <p>Boxes, Fuse.
Detroit Fuse & Mfg. Co.
General Electric Co.</p> <p>Boxes, Junction and Outlet.
General Electric Co.</p> <p>Cable Clamps.
Union Elec. Co.</p> <p>Chains, Silent Driving.
Link Belt Co.</p> <p>Chandeliers.
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Dyno Utilities Mfg. Co.</p> <p>Conduit, Flexible.
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Tubular Woven Fabric Co.</p> <p>Conduit Fittings.
Pass & Seymour, Inc.</p> <p>Controllers, Motor.
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Westinghouse El. & Mfg. Co.</p> <p>Cooking Appliances, Electric.
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Wisconsin Electric Co.</p> <p>Panel-boards.
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Pittsburgh Electric Specialties Co.</p> <p>Shade Holders.
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National X-Ray Reflector Co.</p> <p>Sign Letters.
Federal Sign System (Electric).</p> <p>Sirens, Motor.
Federal Sign System (Electric).</p> <p>Sockets.
General Electric Co.
Pass & Seymour, Inc.</p> <p>Sprockets, Silent Chain.
Link Belt Co.</p> | <p>Starters, Motor.
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Electrical Testing Laboratories.</p> <p>Theater Dimmers.
General Electric Co.</p> <p>Tools, Linemen's.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Tools, Portable Electric.
Wisconsin Electric Co.</p> <p>Transmission, Machinery.
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Link Belt Co.</p> <p>Transformers.
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Eureka Vacuum Cleaner Co.
Frantz Premier Co.
Hoover Suction Sweeper Co.
Hurley Machine Co.
Innovation Electric Co.
National Sweeper Co.
Ramey Mfg. Co.
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Western Electric Co.
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Brokaw-Eden Mfg. Co.
Frantz Premier Co.
Hurley Machine Co.
Western Electric Co.</p> <p>Window Displays.
Doty & Scrimgeour Sales Co.</p> <p>Wires and Cables.
General Electric Co.
Habitshaw Electric Cable Co.
Western Electric Co.</p> <p>Wiring Devices.
General Electric Co.</p> |
|---|--|--|--|

Save This Issue Because—It is the intention of the publishers of *Electrical Merchandising* shortly to present a new form of index of unusual value to readers. To get full benefit from it, it will be necessary for you to save each issue.

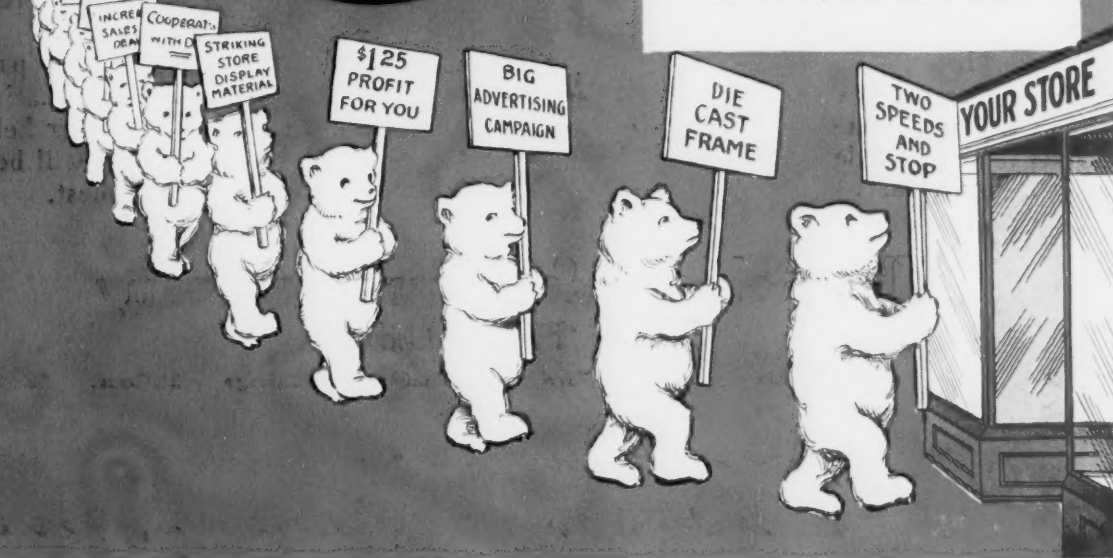


Polar Cub

REG. U.S. PAT. OFF.

Electric Fan

\$5



Making a Good Thing Better

Polar Cub was the *first* low-priced fan. It "led the procession" by proving the vast sales field for an individual fan at a price within the reach of everybody.

This year Polar Cub is without question the *best* low-priced fan. It has been improved and perfected in every detail. It gives much bigger value than the previous models. But the price remains \$5. And it will be advertised on a bigger scale than ever before—in *The Saturday Evening Post*, *Collier's*, *Literary Digest*, and *System*.

Here Are the 1917 Improvements:

- Two speeds and stop.
- Die-Cast frame (57 fewer parts).
- Bearings are integral part of die-casting.
- Cannot get out of alignment.
- Guard spot-welded and practically unbreakable.
- Fan adjustable to any angle.
- Hook on base for attaching to wall if desired.
- Equipped with 8-foot cord and plug.
- Blade diameter, 6 inches; height of fan, 8 inches; net weight, 3 lbs. 5 oz.

Trade Discounts as Follows:

Less than 6 fans.....\$5.00 each
Six fans and over.....\$3.75 each
Terms: 2-10-30, f.o.b. New Haven.
Full freight allowed.

Fans packed 6 and 12 to the package. Upon request we furnish free striking, sales-making store display material. **ORDER EARLY.**—We have largely increased our production facilities, but despite this the demand will exceed the supply.

So place your order now. If further information is wanted, write us.

THE A. C. GILBERT CO.
402 Fox Street New Haven, Conn.
Canadian Representatives
Menzies & Co., Ltd., Toronto, Ontario



Which Do You Prefer—to Buy Fans or to Sell them?

The Robbins and Myers sales plan concentrates the main effort in moving fans across the dealer's counter, rather than in getting them into the dealer's stock room. We have learned that by creating a desire for Robbins & Myers Fans in the minds of the public, by making them quick, easy, profitable sellers for the dealer, the dealer orders will take care of themselves.

Because of the success of this policy, we have kept on year after year, advertising R & M Fans to the public—your customers—through the leading national magazines.

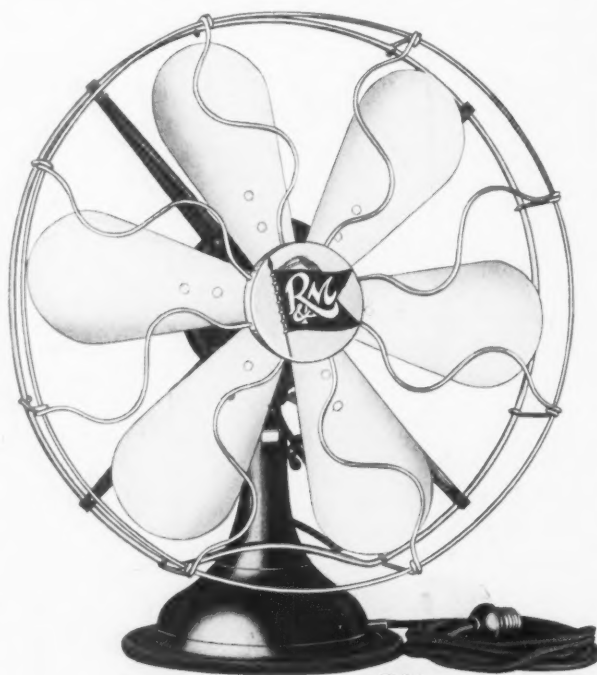
This advertising has made the Robbins & Myers Fan the best known, easiest selling fan in the world.

As a result, new dealers have come to us with but little solicitation as fast as

we could take care of their requirements. And our old dealers have stuck to R & M Fans season after season, secure in the knowledge that the Robbins & Myers sales plan will sell fans for them as well as to them. They know they can count on a low selling cost and a good profit on R & M Fans.

In addition to the general advertising on Robbins & Myers Fans, special sales helps are furnished free to the dealer for local use. These helps are pure retail advertising, prepared in the dealer's name and with the dealer's address alone. It is just as exclusively the dealer's advertising as though he prepared it himself.

Catalog, prices and information on the selling help we furnish will be sent on request.

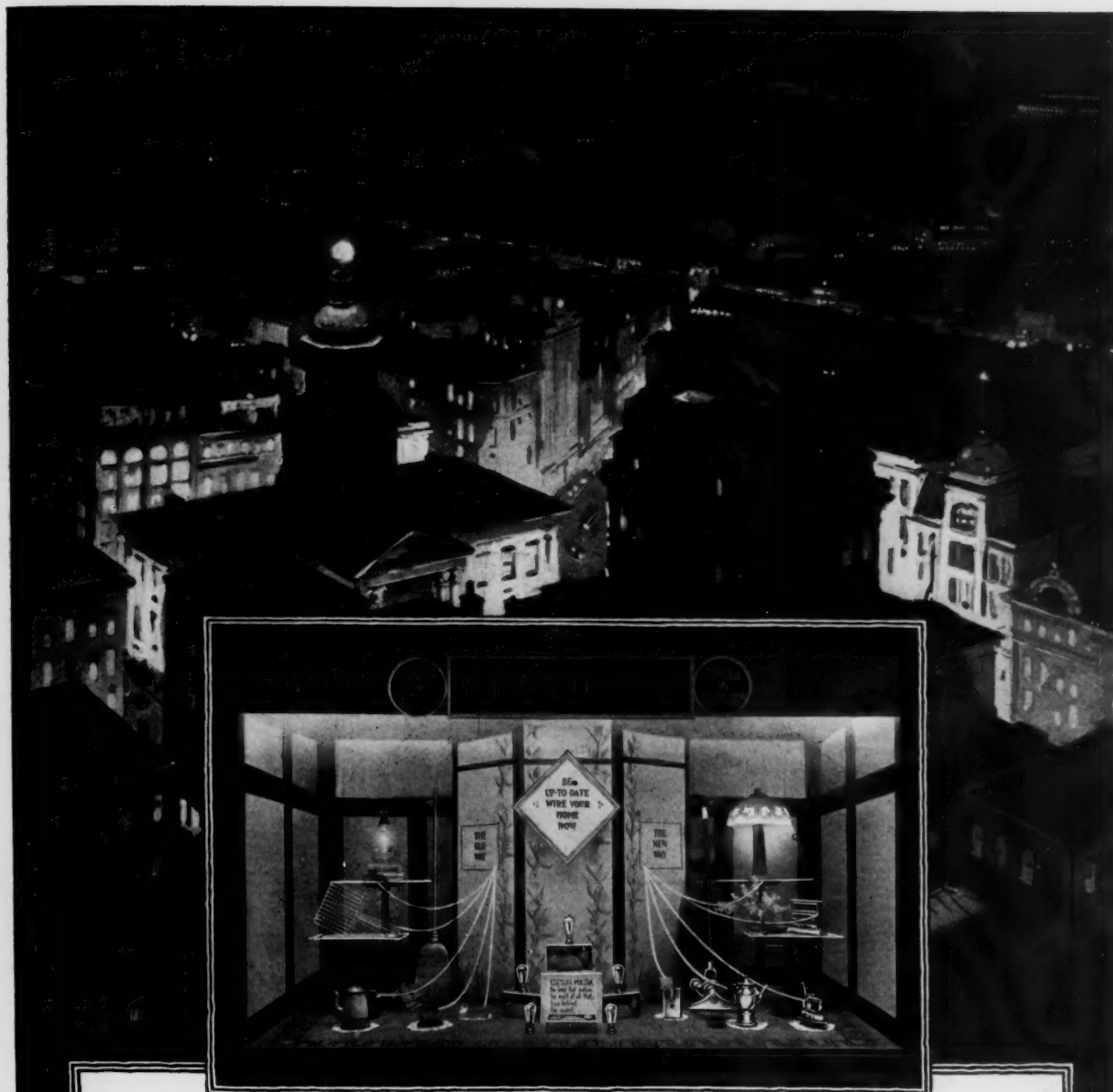


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The Robbins & Myers Company
SPRINGFIELD, OHIO

New York Boston Philadelphia Buffalo Cleveland Cincinnati Chicago St. Louis San Francisco

Robbins & Myers Fans



Windows that Work in the Night

Light up your windows at night—as soon as the sun gets low.

Let them work for you when daylight doesn't compete—and when nearby stores are pitch dark.

People go by all the evening—but they don't know they are going by an Electric Shop unless they see an Electric Shop.

Good store and window lighting is a dividend paying investment.

Poor lighting is an expense.

Establish that difference in your community. Let your own windows prove to every merchant—every evening—that the latest types of Edison Mazda Lamps, intelligently used, make windows competition-proof.

Set the example in your city.

EDISON LAMP WORKS OF GENERAL ELECTRIC COMPANY HARRISON, N. J.

7039

EDISON MAZDA LAMPS
MADE IN U.S.A. AND BACKED BY MAZDA SERVICE

The maker's name tells who made
the lamp; the mark MAZDA tells
exactly what standard of excel-
lence governed its making.



MAZDA

*"Not the name of a thing,
but the mark of a service"*

— The Meaning of MAZDA —

MAZDA is the trademark of a world-wide service to certain lamp manufacturers. Its purpose is to collect and select scientific and practical information concerning progress and developments in the art of incandescent lamp manufacturing and to distribute this information to the companies entitled to receive this Service. MAZDA Service is centered in the Research Laboratories of the General Electric Company at Schenectady, New York. The mark MAZDA can appear only on lamps which meet the standards of MAZDA Service. It is thus an assurance of quality. This trademark is the property of the General Electric Company.



RESEARCH LABORATORIES OF
GENERAL ELECTRIC COMPANY



FACTORY













Widespread Advertising Helps Local Sales of G-E Motors

Increased industrial activity has spread to every nook and corner. Millions of copies of G-E Advertising during 1917 will cover the increased buying areas more intensively and thoroughly than ever before.

- A million copies to electrical men.
- A million and a half copies to farmers.
- A million copies to textile manufacturers.
- A million copies to carpenters, machinists, etc.
- Six hundred thousand copies to food makers.
- Millions of copies to industrial men, owners, managers, etc.

And over twenty million copies of G-E Advertising will create prestige for the G-E trademark in the popular magazines.

These figures give you an idea of the size of the biggest combined motor sales effort the Company has ever attempted.

A complete digest of this campaign is available in a special booklet. Have you received your copy? If not, ask our Electrical Advertiser Service for a copy of "G-E Motor Advertising, 1917."

General Electric Company
General Office Schenectady, N. Y.
6937






















THE GREATEST FAN CAMPAIGN EVER PLANNED

This page will give you only an inkling of the work done by the General Electric Company this year for the retail sellers of its fans.

← *Poster and
Window Display*

← *Booklets
and Folders*

← *Post Cards
and Blotters*


← *Newspaper Advertisements
and Lantern Slides*

← *Circular Letters
on Your Own Stationery*

← *How to Run
Your Campaign*

There is a G-E fan distributor in practically every large city. For further details of our local campaign material write the distributor nearest to you or our nearest office.

General Electric Company

General Office:  Schenectady, N. Y.

Sales Offices in All Large Cities



Radieye

for pull-socket chains
for switch-plates

- a new guiding light

Sold by distributors in all large cities

Ask for booklet B-3413

General Electric Company

6775

Thor

A Curtain Talk on

One of the funniest things about selling washing machines is the idea many women have that the machine damages the clothes.

To fully appreciate how funny these people are just watch a woman washing clothes on a washboard. It won't take long to see that she doesn't WASH the dirt out—she RUBS it out, and the treatment she gives the clothes is far more severe than they would receive in the crudest of washing machines.

Of course, the strongest point about the *Thor* is the saving in labor, but the saving in wear-and-tear is a pretty close second. The fact that there is absolutely no rubbing in the cylinder will appeal to every woman when you explain how the constant forcing of the hot suds through each article is what does the work.



**The Only Complete Line
of Electric Washers,
Vacuum Cleaners and
Ironing Machines**

*A Size for Every Family
A Style for Every Purse*

Selling *Thor* Washers

*For years the Dee Lace Cleaning Company of Cincinnati has been washing all its laces in *Thor* Machines.*

These people specialize in cleaning fine laces and they have been using *Thor* machines for this purpose for years. Isn't this pretty good proof that even the most delicate article may be put into the *Thor* with perfect safety?

The next time you have a skeptical customer who thinks it would not be safe to put her family washing into an electric machine, tell her about the work the *Thor* is doing for the Dee Company and ask her if she can figure out how they could hold their business if the machines were injuring the laces even in the slightest degree.

HURLEY MACHINE COMPANY

35 So. Clinton St., Chicago
147 W. 42d St., New York

Write for new Catalog C



NATIONAL MAZDA

THE WAY TO BETTER LIGHT

THIS bright-eyed youngster appears on a Saturday Evening Post page April 14th. He and his motherly-looking grandma, cleaning her glasses, are links in the "Better Light for Better Sight" series of full-page National MAZDA messages that will hit the millions of Post readers at frequent intervals this year, urging the wiring of non-wired homes and telling all who are now using electricity to fill every socket with the National MAZDA lamps that are on sale at your store. Co-operate—through your window, the picture shows, and the newspapers.

NATIONAL LAMP WORKS
OF GENERAL ELECTRIC CO.
NELAPARK CLEVELAND

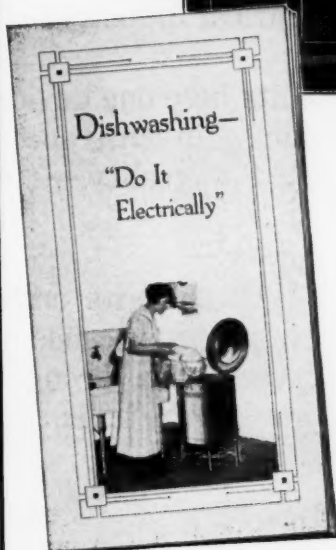


PEOPLE WANT DISHWASHERS

Do
they
know
where
they
can
get
them
?



Do
you
know
how
you
can
reach
them
?



Folder B-135

Send out this folder by mail or enclose it in packages. Distribute it at exhibitions, etc. Order by number the quantity you wish.

Window Display W-102

Here is a window that will draw dishwasher inquiries. All material necessary for trimming this window, with the exception of the dishwasher, mirror, table and flags, will be furnished free to you. Order by number.

These Western Electric DISHWASHER SALES HELPS

will enable you to get in touch with all of these people.

The sales helps are absolutely free.

Write to us to-day—and tell us what you need.



Booklet B-126

Use this colored booklet as a "closer" when interest has already been aroused. Order by number the quantity you wish.



Western Electric Company
INCORPORATED

New York	Atlanta	Chicago	Kansas City	San Francisco
Buffalo	Richmond	Milwaukee	St. Louis	Oakland
Newark	Savannah	Indianapolis	Dallas	Los Angeles
Philadelphia	New Orleans	Detroit	Houston	Seattle
Boston	Birmingham	Cleveland	Oklahoma City	Portland
Pittsburgh	Cincinnati	Minneapolis	St. Paul	Omaha
			Denver	Salt Lake City

EQUIPMENT FOR EVERY ELECTRICAL NEED



BENJAMIN

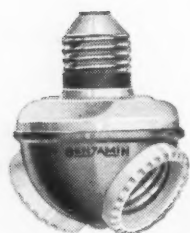
An Institution Built on Ideas

THE BENJAMIN organization has made the name *Benjamin* synonymous with many remarkable and useful ideas, wrought into useful things.

It has brought into being many original electrical devices making the use of electricity easier—more convenient.

That is, has been, and will be the service of BENJAMIN to the Electrical Industry.

In proof, BENJAMIN submits here one device, the result of originality, inventiveness, and imagination reduced to reality,—the BENJAMIN Two-Way Plug.



This device alone,—because of its originality, because of its simplicity, because of the increased convenience it has brought to users of electricity, stamps the invention as little short of genius.

Benjamin Electric Mfg. Co.

CHICAGO

NEW YORK

SAN FRANCISCO

TORONTO

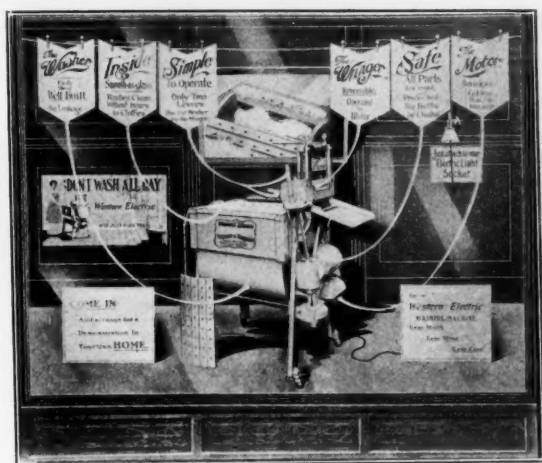
BENJAMIN PRODUCTS

Wireless Clusters
Plug Clusters
Sockets
Wiring Devices
Attachment Plugs
Stand Lamp Clusters

Reflectors
Street Lighting Units
Store and Office Fixtures
Gas and Vapor Proof Fixtures
Industrial Lighting Units
Show Case Lighting

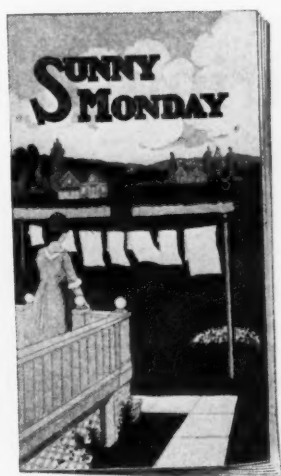
Panel Boards
Factory Signals
Safety Devices for
Punch Presses
Screw Drivers
and Tool Sets

Finding Your Prospects



W-31
Window Display

Hundreds of people are sold on the idea of electric washing. Others need just a little persuasion. If you can reach both classes—have them disclose their identity—you have a fine opportunity to make sales.



B-125
Attractive Booklet

Western Electric Washer and Wringer Sales Helps

—find the prospects for you. The window tells them a sales story convincingly—helping them to decide. The booklet is a closer; it sums up all the advantages, while the mailing folder may arouse first interest or bring an inquiry to you.



B-141
Mailing Folder

Western Electric Company INCORPORATED

New York	Atlanta	Chicago	Kansas City	San Francisco
Buffalo	Richmond	Milwaukee	St. Louis	Oakland
Newark	Savannah	Indianapolis	Dallas	Los Angeles
Philadelphia	New Orleans	Detroit	Houston	Seattle
Boston	Birmingham	Cleveland	Oklahoma City	Portland
Pittsburgh	Cincinnati	Minneapolis	St. Paul	Omaha
			Denver	Salt Lake City

EQUIPMENT FOR EVERY ELECTRICAL NEED
Member Society for Electrical Development. "Do it Electrically"



One of the vital factors in a successful business is to keep the stock moving.

Other things being equal, the merchant who turns over his stock most frequently makes the most money.

Idle stock is idle money and idle money brings no dividends. A well-kept and fully assorted stock of

P & S Sockets and Wiring Devices

is ample and sufficient to fulfill practically every requirement for this class of equipment.

It is rarely indeed that you will find it necessary to turn to any other source of supply for socket or receptacle equipment for any installation no matter what its character.

Many of the most successful electrical dealers are finding a direct and profitable advantage in **standardizing** on P & S Sockets and Receptacles—an advantage not only in the carrying of stock but also because the greater familiarity with the special advantages and qualities of P & S goods helps in the pointing out of these qualities to the final customer, and this makes selling easier, quicker and more profitable.

Our catalog shows the complete P & S line and you will also probably be interested in our little booklet "The Gateway of Electric Service." It will give you many valuable selling points about sockets.



Illustrating the interchangeability of parts for P & S sockets.

Pass & Seymour, Inc., Solvay, N. Y.

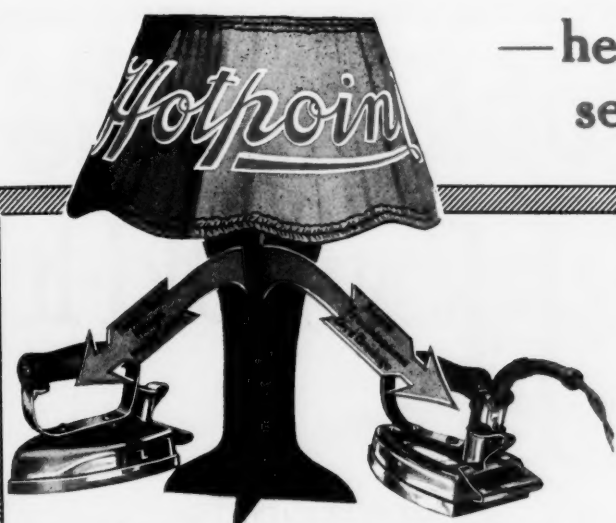
—here's how we help you
sell the 1917 Model

Hotpoint Iron

[Two important and exclusive improvements on the 1917 model]

To the cumulative value of 13 years of leadership both on the Iron and in our publicity, we now add two important improvements. You will find them fully illustrated and described in—

- our four-color, full page ad in the May *Ladies' Home Journal*, out April 20th.
- our two-color center spread in the *Saturday Evening Post* of April 28th, out April 26th.



Hotpoint Whirling Lamp Display



Hotpoint Price Cards

Over 2,500,000 women will see these announcements—will be influenced to buy Hotpoint Irons.

Identify yourself with what "Hotpoint" stands for. Localize this consumer demand by using our Free Co-operative Helps. Cash in on this extensive national publicity—more extensive than has ever been devoted to a single item of electrical merchandise.

Bigger Iron Business

When you sell a Hotpoint Iron you follow the line of least resistance—you don't have to talk your prospect into accepting a Hotpoint, she's already sold.

It's simply a matter of letting the women of your community know that you handle the Hotpoint Iron.

Leave the rest to your cash register.

Free Advertising Material

For this Iron Campaign we offer in addition to the advertising matter for the entire line, the following special Iron items:

- Whirling lamp display. A 16 c. p. incandescent lamp revolves the beautifully lithographed blue shade. Sets forth in a convincing way the two latest improvements to the Hotpoint Iron.
- Price cards—lantern slides—street car cards are furnished as per the illustrations.
- Folders are furnished with your imprint. This is a clever one, with a cutout on the front cover.
- Blue paper bands imprinted with "Hotpoint," one of which is to be placed across soleplate of each Hotpoint Iron in your window.
- Specially decorated carton carrying out blue and red color scheme of Iron Campaign.
- Advertising frames. Imitation mahogany cardboard frames to mount Hotpoint National ads for display in your window.

On top of this, there is a completely equipped copy department ready to get up ads for your local use, prepare special selling plans, etc.

Write our nearest office for further particulars.

**HOTPOINT ELECTRIC
HEATING CO.**

Ontario, Cal., Chicago, New York, London
Canadian Hotpoint Electric Heating Co.

Limited
Toronto, Canada



Hotpoint Lantern Slide



Hotpoint Street Car Card

More Than 4000 Salesmen Read **How-I-Did-It**

Men from These Progressive
Central Stations, Jobbers and
Dealers Have Contributed to
HOW-I-DID-IT:

CONSUMERS POWER CO., Owosso,
Mich.
PUBLIC SERVICE COMPANY, Newark,
N. J.
WILLIAM E. ALFORD, Baltimore, Md.
ELECTRIC SUPPLY & PLUMBING CO.,
Jackson, Miss.
PHILADELPHIA E. L. CO., Phila., Pa.
LOWELL E. L. CORP., Lowell, Mass.
WALTER C. ROE, Elyria, Ohio
MADISON MANUFACTURING CO.,
Pittsburgh, Pa.
SUBURBAN GAS & ELECTRIC CO.,
Revere, Mass.
WEST PENN POWER CO., Pittsburgh,
Pa.
PUBLIC SERVICE ELECTRIC CO.,
Camden, N. J.
THE WM. T. JOHNSTON CO., Cincin-
nati, Ohio
WAPSIE POWER & LIGHT CO., Mount
Vernon, Iowa
CENTRAL HUDSON GAS & ELEC-
TRIC CO., Poughkeepsie, N. Y.
MINNEAPOLIS GENERAL ELECTRIC
CO., Minneapolis, Minn.
MARSHALL COUNTY POWER &
LIGHT CO., Blue Rapids, Kans.
YOUNGSTOWN & SHARON STREET
RAILWAY CO., Youngstown, Ohio
CLEVELAND ELECTRIC ILLUMI-
NATING CO., Cleveland, Ohio
FORT DODGE GAS & ELECTRIC COM-
PANY, Fort Dodge, Iowa
T. M. E. R. AND L. CO., Milwaukee, Wis.
IOWA RIVER LIGHT & POWER CO.,
Eldora, Iowa
TEXAS PUBLIC SERVICE COMPANY,
Mount Pleasant, Texas.
TEXAS POWER & LIGHT CO., Waco,
Texas.
PUBLIC SERVICE ELECTRIC CO.,
Perth Amboy, N. J.
THE ELECTRIC SERVICE & SUPPLY
CO., Aberdeen, Wash.
JANESVILLE ELEC. CO., Janesville,
Wis.
COMMONWEALTH EDISON CO., Chi-
cago, Ill.
SCRANTON ELECTRIC CO., Scranton,
Pa.
MINNEAPOLIS GENERAL ELECTRIC
CO., Minneapolis, Minn.
ACME ELEC. ILLUMINATING CO.,
Rock Island, Ill.

In six months **HOW-I-DID-IT** has established
itself with the entire electrical industry.

Over 4000 salesmen from every state in the
Union have on request been added to the list for
HOW-I DID IT.

These men read **HOW-I DID-IT** for the selling
ideas it gives—particularly with regard to house,
store and factory wiring and lighting.

HOW-I-DID-IT is issued solely to help good
salesmen to become better salesmen.

New business managers should see that their
salesmen all receive a copy each month. A letter
will put their names on the list.

You Can Help

in this co-operative service by urging the men in
your organization to contribute.

The March Issue is a Wiring Number

In connection with "Wire Your Home Time" all
articles in the March Number are on wiring—
successful sales ideas on wiring homes and stores.
Be sure to get this issue.



GUARANTEED BY THE NAME

Westinghouse Lamp Company
165 Broadway, New York, N. Y.

Sales Offices and Warehouses Throughout the Country

Westinghouse

"Sew-Motors"

Motor Out Of Operator's Way

Every user likes to have the sides of the sewing machine table clear so that she may place her tape measure, her scissors and her thread there, where she can get to them most easily. Note how snugly the "Sew-Motor" fits upon the back of the sewing machine entirely out of the operator's way.

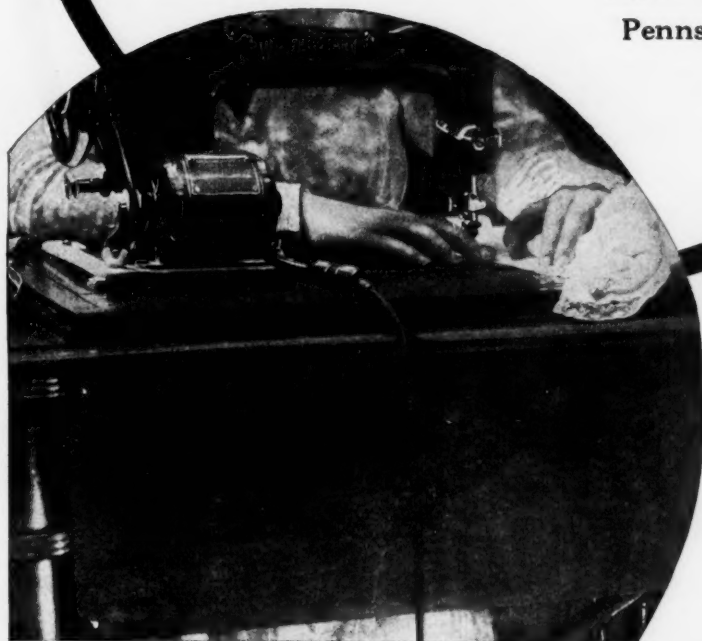
W

WESTINGHOUSE
ELECTRIC

With the "Sew-Motor" comes the most complete merchandising plan ever presented upon a sewing machine motor. Have you received your copy? If not, send for it now.

Westinghouse Electric & Manufacturing Co.

East Pittsburgh
Pennsylvania



Ten Big Selling Points

- "Sew-Motor" folds up with head of machine.
- Operator sits in natural position facing needle with foot on treadle.
- Positive belt drive—no cork pulleys to be replaced.
- Speed regulator out of way, permanently attached to machine.
- Speed regulator gives any speed from zero to 800 stitches per minute.
- Motor out of way when operating, leaving right hand side of machine-table clear.
- Motor quiet in operation.
- Absolutely clean. Lubricated with grease cups, no danger of oil running out on work.
- Motor permanently attached to machine. Does not depend on its weight alone to hold it in place, no danger of its slipping out of place.
- Comprehensive Dealers' helps and service.

An Attractive Addition
to the Westinghouse
Fan Family



The New 10-Inch Fan

This fan differs from our others only in that the blades are of polished nickel with guard to match. The frame and base are of dark, drawn metal. This combination of black and nickel gives the new design a quiet richness and decorative charm possessed by no other fan.

It has all the convenient features of our other standard fans, as well as that high standard of reliability characteristic of all Westinghouse fans.

The Westinghouse Electric Company has an established record for goods of unquestioned reliability. Every new article added to our line must therefore measure up to that high standard which has won the confidence of millions of users.

Back of it all is a vast selling plan, national in its scope—embracing every practical means of appeal to the buying public.

The fan season is on its way. May we outline our selling plan to you?

583

Westinghouse Electric & Mfg. Company

Sales Offices in All Large
American Cities

East Pittsburgh, Pa.

Westinghouse

The New
Westinghouse
10-Inch Fan
with Nickel
Blades and
Guards

Stationary and
Oscillating for all
Commercial
Circuits

A Popular
Size for
Home Use



UNIVERSAL

ELECTRIC IRONS

Made right, from plug to point, from handle to sole plate. Only thoroughly tested and rigidly inspected materials are used in their construction.

The Hood

Heavily nickel plated and beautifully finished. Has heat-proof handle which cannot work loose.

The Heating Unit

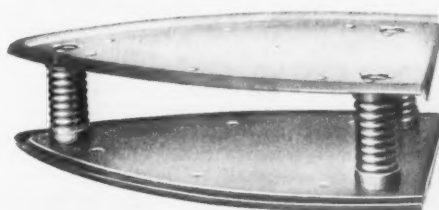
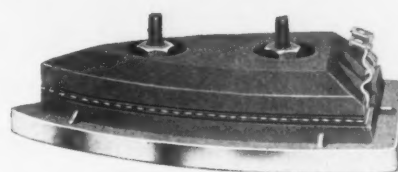
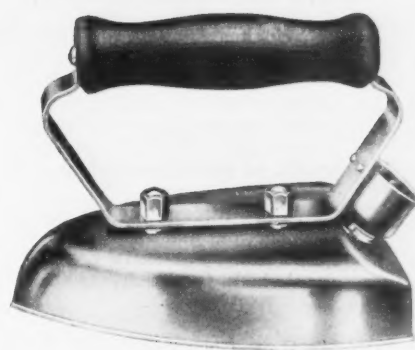
is made of the very best Nichrome wire, a very much larger quantity being used than in any other Iron, covering practically the entire heating surface. Such construction prolongs the life of the Unit and in conjunction with our extra heavy sole plate makes possible an unequalled storage of heat.

Unequaled Heat Storage

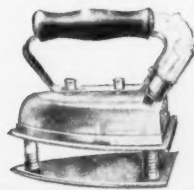
The pressure plate and the sole plate are so closely fitted together that they are practically one piece. The "Universal" consumes less current because there is no waste heat.

The Fire-Proof Stand

Nickel plated and very strong. Lower plate always cool.



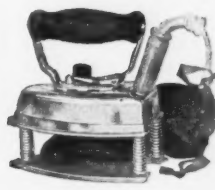
No. E901 De Luxe \$5.00
With Push Button Switch
No. E9081 De Luxe \$6.00



No. E905 \$4.50
With Push Button Switch
No. E9051 \$5.50



No. E902 \$4.50
Tip-up Stand and
equipped with Reversible Stand



Tourist's Iron
With Velvet Bag
No. E9021 \$4.75



No. E9023 3 lbs. \$4.00
No. E9024 4 lbs. 4.50
No. E9035 5 lbs. 4.50

LANDERS, FRARY AND CLARK
NEW BRITAIN, CONNECTICUT



WASHINGTON, April 15, 1917.—
President Wilson to-day addressed the following message of creative counsel to the people of the United States.

The President's Proclamation

My Fellow Countrymen:

THE entrance of our own beloved country into the grim and terrible war for democracy and human rights which has shaken the world creates so many problems of national life and action which call for immediate consideration and settlement that I hope you will permit me to address to you a few words of earnest counsel and appeal with regard to them.

We are rapidly putting our navy upon an effective war footing and are about to create and equip a great army, but these are the simplest parts of the great task to which we have addressed ourselves.

No Selfishness in This Fight.

There is not a single selfish element, so far as I can see, in the cause we are fighting for. We are fighting for what we believe and wish to be the rights of mankind and for the future peace and security of the world. To do this great thing worthily and successfully we must devote ourselves to the service without regard to profit or material advantage and with an energy and intelligence that will rise to the level of the enterprise itself. We must realize to the full how great the task is and how many things, how many kinds and elements of capacity and service and self-sacrifice it involves.

These, then, are the things we must do and do well, besides fighting—the things without which mere fighting would be fruitless.

To Help Those With Whom We Fight.

We must supply abundant food for ourselves and for our armies and our seamen not only; but also, for a large part of the nations with whom we have now made common cause, in whose support and by whose sides we shall be fighting.

We must supply ships by the hundreds out of our shipyards to carry to the other side of the sea, submarines or no submarines, what will every day be needed there and abundant materials out of our fields and our mines and our factories with which not only to clothe and equip our own forces on land and sea but also to clothe and support our people for whom the gallant fellows under arms can no longer work; to help clothe and equip the armies with which we are co-operating in Europe and to keep the looms and manufacturing there in raw materials: coal to keep the fires going in ships at sea and in the furnaces of hundreds of factories across the sea: steel out of which to make arms and ammunition both here and there: rails for worn out railways back of the fighting fronts; locomotives and rolling stock to take the place of those every day going to pieces; mules,

horses, cattle for labor and for military service: everything with which the people of England and France and Italy and Russia have usually supplied themselves but cannot now afford the men, the materials or the machinery to make.

Industry as Essential as Men.

It is evident to every thinking man that our industries, on the farms, in the shipyards, in the mines, in the factories, must be made more prolific and more efficient than ever and that they must be more economically managed and better adapted to the particular requirements of our task than they have been: and what I want to say is that the men and the women who devote their thought and their energy to these things will be serving the country and conducting the fight for peace and freedom just as truly and just as effectively as the men on the battlefield or in the trenches.

The industrial forces of the country, men and women alike, will be a great national, a great international service army—a notable and honored host engaged in the service of the nation and the world, the efficient friends and saviors of free man everywhere. Thousands, nay, hundreds of thousands of men otherwise liable to military service will, of right and of necessity, be excused from that service and assigned to the fundamental sustaining work of the fields and factories and mines, and they will be as much part of the great patriotic forces of the nation as the men under fire.

I take the liberty, therefore, of addressing this word to the farmers of the country and to all who work on the farms. The supreme need of our own nation and of the nations with which we are co-operating is an abundance of supplies and especially of foodstuffs.

Food Supplies a Superlative Need.

The importance of an adequate food supply, especially for the present year, is superlative. Without abundant food, alike for the armies and the peoples now at war, the whole great enterprise upon which we have embarked will break down and fail. The world's food reserves are low. Not only during the present emergency but for some time after peace shall have come both our own people and a large proportion of the people of Europe must rely upon the harvests in America.

Upon the farmers of this country, therefore, in large measure rests the fate of the war and the fate of the nations. May the nation not count upon them to omit no step that will increase the production of their land or that will bring about the most effectual co-operation in the sale and distribution of their products?

ELECTRICAL MERCHANDISING welcomes this opportunity to give further publicity to this inspiring message of the President; not only because of the Government's request for such publicity but also because we know that the sentiment of National solidarity and loyal organization will receive the enthusiastic support of the entire electrical industry.

PUBLISHERS—*Electrical Merchandising.*



to the American People

The time is short. It is of the most imperative importance that everything possible be done and done immediately to make sure of large harvests. I call upon young men and old alike and upon the able-bodied boys of the land to accept and act upon this duty—to turn in hosts to the farms and make certain that no pains and labor is lacking in this great matter.

Resisting the Temptation of War Profits.

I particularly appeal to the farmers of the South to plant abundant foodstuffs as well as cotton. They can show their patriotism in no better or more convincing way than by resisting the great temptation of the present price of cotton and helping, helping upon a great scale, to feed the nation and the peoples everywhere who are fighting for their liberties and for our own. The variety of their crops will be the visible measure of their comprehension of their national duty.

The Government of the United States and the Governments of the several States stand ready to co-operate. They will do everything possible to assist farmers in securing an adequate supply of seed, an adequate force of laborers when they are most needed at harvest time, and the means of expediting shipments of fertilizers and farm machinery, as well as of the crops themselves when harvested.

The course of trade shall be as unhampered as it is possible to make it and there shall be no unwarranted manipulation of the nation's food supply by those who handle it on its way to the consumer. This is our opportunity to demonstrate the efficiency of a great democracy and we shall not fall short of it.

Middlemen as Minute-men.

This let me say to the middlemen of every sort, whether they are handling our foodstuffs or our raw materials of manufacture or the products of our mills and factories. The eyes of the country will be especially upon you. This is your opportunity for signal service, efficient and disinterested. The country expects you, as it expects all others, to forego unusual profits, to organize and expedite shipments of supplies of every kind, but especially of food, with an eye to the service you are rendering and in the spirit of those who enlist in the ranks, for their people, not for themselves. I shall confidently expect you to deserve and win the confidence of people of every sort and station.

To the men who run the railways of the country, whether they be managers or operative employees, let me say that the railways are the arteries of the nation's life and that upon them rests the immense responsibility of seeing to it that these arteries suffer

no obstruction of any kind, no inefficiency or slackened power.

To the merchant let me suggest the motto: "Small profits and quick service"; and to the shipbuilder the thought that the life of the war depends upon him.

The food and the war supplies must be carried across the seas no matter how many ships are sent to the bottom. The places of those that go down must be supplied and supplied at once.

Armies are Helpless Without Industrial Support.

To the miner let me say that he stands where the farmer does: the work of the world waits on him. If he slackens or fails, armies and statesmen are helpless. He also is enlisted in the great service army.

The manufacturer does not need to be told, I hope, that the nation looks to him to speed and perfect every process; and I want only to remind his employees that their service is absolutely indispensable and is counted on by every man who loves the country and its liberties.

Let me suggest also that every one who creates or cultivates a garden helps and helps greatly to solve the problem of the feeding of the nations and that every housewife who practises strict economy puts herself in the ranks of those who serve the nation.

This is the time for America to correct her unardonable fault of wastefulness and extravagance.

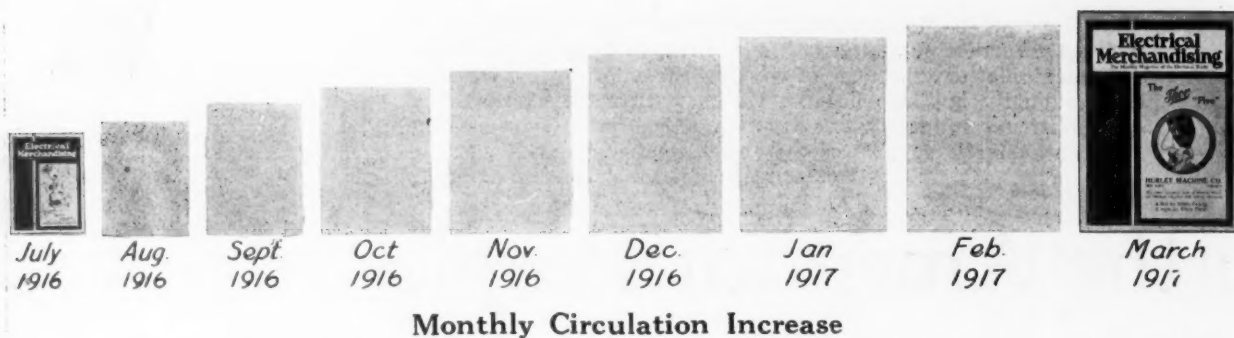
This is the Hour for Thrift and Efficiency.

Let every man and every woman assume the duty of careful, provident use and expenditure as a public duty, as a dictate of patriotism which no one can now expect ever to be excused or forgiven for ignoring.

In the hope that this statement of the needs of the nation and of the world in this hour of supreme crisis may stimulate those to whom it comes and remind all who need reminder of the solemn duties of a time such as the world has never seen before, I beg that all editors and publishers everywhere will give as prominent publication and as wide circulation as possible to this appeal. I venture to suggest, also, to all advertising agencies that they would perhaps render a very substantial and timely service to the country if they would give it widespread repetition, and I hope that clergymen will not think the theme of it an unworthy or inappropriate subject of comment and homily from their pulpits.

The supreme test of the nation has come. We must all speak, act and serve together.

WOODROW WILSON.



Merchandising Has Just Naturally Grown

Ten months ago Merchandising was an idea. Electrical Merchandise embodied that idea—the thought that the selling side of the electrical industry needed a journal of its own. That the men in the electrical business—the merchant, the contractor, the jobber, the material, appliance and fixture manufacturers, the central station commercial departments—were looking for a journal whose main editorial purpose was to be a medium of exchange in ideas for selling more electrical goods; ideas and business suggestions which other men, readers, could apply to their own business and make money.

Electrical Merchandising has grown from this vital seed. How successfully the idea has taken hold, the diagrams above show. Without special promotion, without forcing, without elaborate campaigns, the paid circulation of Electrical Merchandising has grown over 400%—steadily and evenly, from month to month.

Advertisers as well as readers have recognized the possibilities of Electrical Merchandising. Advertising pages have more than doubled in this same period. Advertisers have found that through this medium they can reach the men who want to know how to sell to the final consumer.

The success of Electrical Merchandising belongs equally to our readers and to our advertisers, and those who have shared in it are the strongest “boosters” for this magazine. That is why we can so confidently say—to paraphrase a famous catch-line—

Ask the Man Who Buys It!



Profitable Sellers at all Times

A small margin of profit on a product that is a "repeater"—a product that brings the customer back to buy again and again—is a better article to stock than a product that yields a larger profit on the initial sale but makes no provision for a "repeat."

Franco Flashlights

not only yield a generous profit on the initial sale (and build *good will* through *good service*) but insure other liberal profits on repeat sales of Radio Batteries. No flash-

light on the market today has the sales-closing talking points and real service merit of Franco Flashlights. Write NOW for catalog and price list.

INTERSTATE ELECTRIC NOVELTY CO.

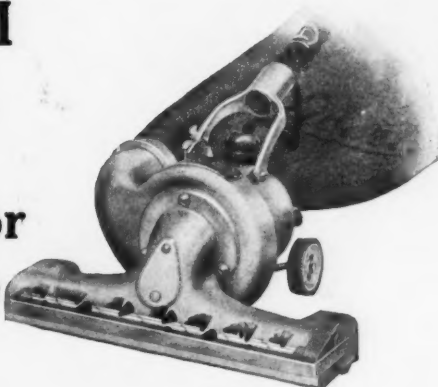
104-114 South 4th Street, Brooklyn, N. Y.

Chicago

San Francisco

Toronto

**UNCLE SAM
Chooses the
LIBERTY
CLEANER for
U.S. Post Office
Service**



**One Lighting
Co. Sells 800
in
One Month—
A New
Record**

The NEW LIBERTY CLEANER Model "C"

Meets the demand for a
**VACUUM CLEANER and SWEEPER
COMBINED**

Its strong suction gets all of the deep-seated dirt from the very substance of a carpet, while its REVOLVING NOZZLE BRUSH brushes up the nap, brightens the colors, and removes all surface litter, threads, lint, etc. The nozzle brush is practically self-cleaning and swings out of the nozzle without removing any screws or belts, ONE of the EXCLUSIVE features which sells the cleaner in competition.

Made for us by the General Electric Co.
under the Kenney patents and our patent applications.

INNOVATION ELECTRIC COMPANY, Inc.

585-589 HUDSON STREET, NEW YORK

Awarded gold and silver medals at Panama-Pacific Exposition.



EFFICIENCY

in the transmission of power to the sewing and stitching machines illustrated resulted in

Greater output
Smaller power bills
Fewer interruptions for repairs
Less wear and tear on machines
Higher limit in the operating speeds

Fewer broken threads
Greatest economy of space
No obstruction of light
No objectionable noise
Mutual satisfaction from piece rates

LINK-BELT SILENT CHAIN DRIVES

have proved their efficiency in this shoe factory over leather belt drives, both transmitting power under the same conditions. Note the summary of the test in the small panel below. Details are given in Folder No. 277—sent on request. Full information regarding Silent Chain Drives can be found in Data Book No. 125, our 112-page price list. With it you can select drives and figure prices.

LINK-BELT COMPANY

PHILADELPHIA

New York . . . 299 Broadway
Boston . . . 49 Federal St.
Pittsburgh . . . 1501 Park Building
St. Louis, Central National Bank Bldg.
Buffalo . . . 698 Ellicott Square
Cleveland . . . 1304 Rockefeller Bldg.
Detroit . . . 732 Dime Bank Building

CHICAGO

Wilkes-Barre, 2nd National Bank Bldg.
Minneapolis . . . 418 S. Third St.
Louisville . . . F. Wehle, Starks Bldg.
Seattle . . . 850 1st Ave., South
Portland, Ore., 14th and Lovejoy Sts.
Los Angeles . . . 161 N. Los Angeles St.
Knoxville . . . Empire Building
Denver, Lindrooth, Shubart & Co.,
Boston Bldg.
San Francisco . . . 461 Market Street

INDIANAPOLIS

New Orleans, Whitney Supply Co.
418 S. Peters St.
Birmingham, D. T. Blakey, 309 Am.
Trust Bldg.
Charlotte, N. C., J. S. Cothran, Com-
mercial Bank Bldg.
Toronto, Canadian Link-Belt Co., Ltd.

Power Transmission Test

Made in Curtis & Jones Co.'s
Shoe Factory, Reading, Pa.
Operating conditions alike for
leather belt and Link-Belt Silent
Chain Drives.

3 H. P. induction motor driving
lineshaft. Duration of each test
run, 61 hours.

Current consumed by leather belt
drive . . . 80 K. W. Hours
Current consumed by Silent Chain
Drive . . . 73 K. W. Hours

**Saving Made by Silent
Chain Drive**

7 K. W. Hours in 61-hour test run.



This **FEDERAL** electrical display is a combination of outlining, roof sign, sign flat against building and electrically illuminated clock.

The Westchester Lighting Co. of Mt. Vernon, N. Y., for whom the installation was made, express the greatest satisfaction and pleasure with Federal design and workmanship.

the central station must lead the way

Selling electric signs to the merchants in your town is largely a matter of convincing them that *electric signs help business.*

But if the central station *itself* does not use an electric sign—proportionate in size to its needs—why should any merchant find one necessary to hold or increase his trade?

Your new-business department is bound to have up-hill work in its sign division, unless it has the eloquent *backing* of a suitable electric sign—on either office building or power plant.

FEDERAL Electric Signs possess the striking originality and unique display effect—the *advertising "punch"*—that invariably attracts attention and ad-

miring comment. They are created by highly skilled sign designers who are masters of effective display effects.

These experts will work out an original design to suit *your* needs—or your customer's—and submit it without obligation, unless accepted. Or they will put your own ideas in practical form—in short, extend the fullest co-operation and selling aid.

You will be interested in seeing some recent FEDERAL installations, shown in Bulletin No. 10. Write for it today.

FEDERAL SIGN SYSTEM (Electric)

Lake and Desplaines Sts.
CHICAGO

627-649 W. 43rd St.
NEW YORK

618 Mission St.
SAN FRANCISCO

Four Factories

Branches in all the large cities



from
power house
to
residence

201st St. Generating Plant—United
Electric Lt. & Power Co.
ECCO USED IN THE LARGEST
POWER HOUSE IN THE
WORLD.

For every purpose and condition requiring dependable transmission of electricity, from the gigantic power house to the small incandescent light in the factory, building or home, there is a standard grade of

ECCO Dependable Insulated WIRE

On your next bid, use ECCO as the entering wedge in offering "Quality Materials at Fair Prices" for the whole job. ECCO is recognized—by its proven dependability—and by widespread advertising.

The use of ECCO Insulated Wire pays, not only in present profits, but also in establishing your business on a *quality*

and not a *cut-price* basis.

We believe in advertising and promoting the policy of "Quality Materials at Fair Prices"—not only for ourselves, but for you.

We have devised a practical plan for your use in submitting bids. We will furnish you the printed matter in connection with it upon request.

THE ELECTRIC CABLE COMPANY

Makers of ECCO Wire for every purpose where rubber-covered wire is used.

10 East 43d Street New York

P. S.—ECCO is not only the dependable quality wire—it works better on the job—pulls smoothly, without kinks.



A Big New Proposition for Central Station Development



The Uno-lite Reading Lamp

A reading lamp that has a bigger sales appeal than the electric iron.

Every Central Station can make money with this lamp because—

Its production has been standardized so that it can be sold **at a profit** for five dollars.

There is nothing cheap about the appearance of the lamp and it can be sold as an ornamental as well as useful lamp.

It is designed for a 100-watt Mazda C lamp and that means increased revenue, for a reading lamp burns seven nights a week.

The **Uno-lite** will be a better load builder than the electric iron.

Use the coupon and send for one pamphlet "Loading Your Lines." It will interest you.

The Uno-lite Co. of America
Indianapolis, Ind.

Specifications:

Height—19½ in.
Diameter of Green Dome—10 in.
Diameter of Diffuser—6 in.
Mazda C-2 (daylight lamp) recommended.
Length of Base—7½ in.

The Uno-lite Co. of America
Indianapolis, Ind.

Please send
"Loading Your Lines" to

Name

Company

Address

A Real Load Builder



HERE IT IS!

The new OHIO-TUEC Electric Cleaner. Pictures cannot do it justice. Send for sample to examine and test.

For the first time—a manufacturer of Electric Cleaners has produced a machine that is "Standardized" in every respect. The OHIO-TUEC is built like a watch or a typewriter. Every machine up to a standard of efficiency. Every part made to gauge.

Efficiency, durability, convenience, safety and appearance—each were considered in the design and construction of the OHIO-TUEC.

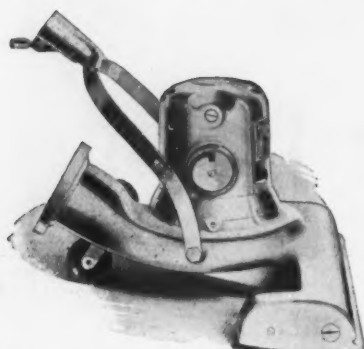
Send for the sample and look it over or ask us to put you on our mailing list of our Central Station and dealer's helps.

The Organization behind the OHIO-TUEC is an old-established firm and has been making Electrical Apparatus for a great many years.

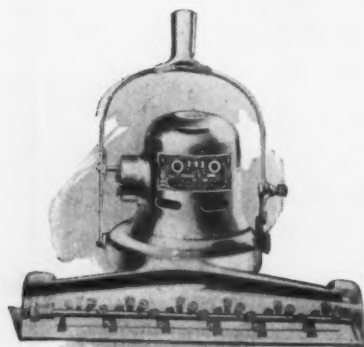
The United Electric Co.

150 Eighth Street, N. E.
Canton, Ohio.

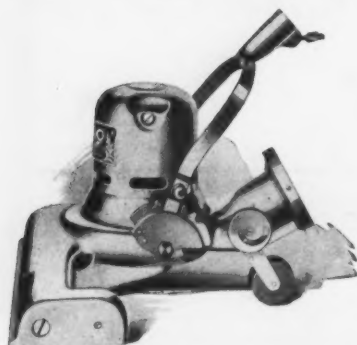
We also manufacture the famous TUEC Stationary Cleaner.



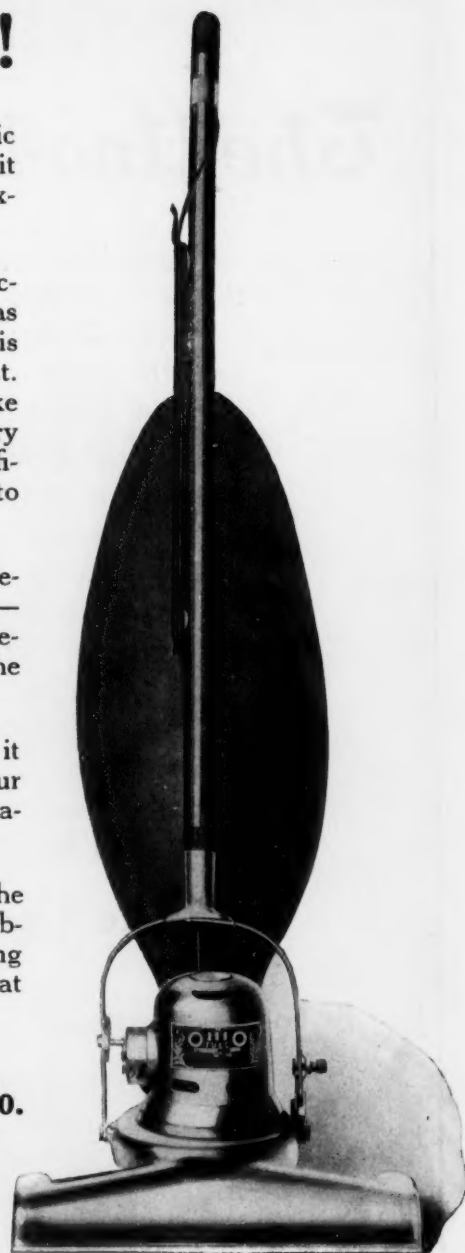
Automatic Switch



View of Positive Driven Brush



Showing Handle Lock and Easy Nozzle Adjustment



The Hoover is GUARANTEED (1) actually to pick up ALL threads, lint, hair etc., no matter how tightly they CLING; (2) to dislodge ALL the deep-down, ground-in, caked-in mud, sand and grit; (3) to raise crushed nap to proper position; (4) to restore original brightness and (5) PROLONG the LIFE of floor covering—IN ADDITION TO doing what others do, viz.: (6) withdrawing surface litter and dirt by air suction.

(Signed) The Hoover Suction Sweeper Co.

Shakes, Sweeps and Suction Cleans!

—and is, therefore,

EASIEST TO SELL!

Central stations who sell *all* makes of vacuum cleaners go on record thusly:

"The Hoover can be sold in **HALF THE TIME** because the Hoover *itself* does what the salesman has to *try* to do with clever salesmanship in the case of other machines.

"With the others you have to devise demonstrating stunts to cover up their weaknesses, while the Hoover has the ability in itself to make the prospect *sold—and sold thoroughly.*"

150% to 300% gross profits a year—due to rapid turn-overs—are what present dealers average on the Hoover. And **VOLUME** is there, too, for each sale runs into money.

Nationally advertised to nearly 30 million people. **Live sales ideas**—live local ad-helps—furnished regularly each month.

If you are a well-established concern, we can show you how to sell from **\$2000 to \$50,000** worth of Hoovers a year. Send in the coupon.

The Hoover Suction Sweeper Co.
Box 903, NEW BERLIN, OHIO

THE HOOVER electric SUCTION SWEEPER

Brush rapidly revolves in suction opening. Wheels hold machine above carpet. Note air space between carpet and floor. This **CUSHIONS** the carpet while the brush bristles sweep deep into the nap.

Carpet drawn up by suction is vigorously shaken and swept by electric motor-driven brush of soft hair.

Tear off and mail to The Hoover Suction Sweeper Co., Box 903, New Berlin, Ohio
Our city now has a population of Tell us how many thousands of dollars worth of HOOVERS we should be able to sell a year.

(Write firm name, city, state and your personal signature on margin below.)



Makes a Salesroom of Your Customer's Laundry

—by being right there where her neighbors can see it lightening her work—saving her time and money—causing her wash pieces to look better and last six times as long. Furthermore—

The Eden LINE

Electric Washing and Wringing Machine

The live, reliable dealer is the one we want—not necessarily the largest. Our products fit into the line of the firm that is first class in every respect. The more particular you are about what you sell—the more co-operation you require on the part of the manufacturer—the more gratified we shall be to hear from you.

is convincingly simple to demonstrate, compact, conveniently table-topped, handsomely enameled and finished—a particularly good washer to show, possessed of so many exclusive patented features that we couldn't begin to jam a description of them into this space. A ready-selling, satisfying big success, backed by national advertising.

Write for detailed information about the EDEN products and special EDEN Agency Proposition.

BROKAW-EDEN MFG. CO., Dept. W, Alton, Ill.



Won the highest possible award at the recent Exposition

The official judges of the Panama-Pacific International Exposition, San Francisco, awarded the EUREKA the *Grand Prize*—the highest possible award for Electric vacuum cleaners.

An award the dealers who sell and the public who use

The EUREKA VACUUM CLEANER

will enthusiastically endorse.

The ingeniously contrived improvements exclusively embodied in the EUREKA—its efficiency and dependability—the speed and ease with which it can be operated—its durability in service and attractive appearance—combine to make this a *money magnet* for live dealers. And we support you "right." GET POSTED.

The Seven Big Selling Points

We have only mentioned seven—there are more—but those seven are real genuine selling features that you know can sell Eureka Cleaners.

Large Dust Bag

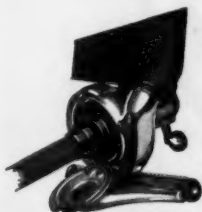
Special Design—side funnel prevents churning of dirt.

Wide Floor Nozzle

Twelve inches wide, cleans large space with every stroke.

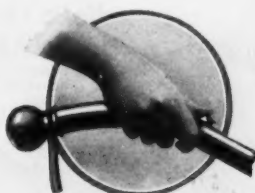
Curve in Handle

Makes machine easy to operate—curve fits natural position of hand. Also note cord protection knob.



Hose Attachment

Makes possible the connection of hose in 10 seconds—Patented Feature.



Button Switch Control

Power controlled by handy button switch enclosed on handle. Very durable. Patent applied for.



Handle Lock

The latest in Vacuum Cleaner handle locks—made of steel, highly nicked—exclusive Eureka feature. Patent applied for.



Detachable Floor Brush

Adjusted to nozzle in second's time. Patented selling feature exclusively Eureka.

Eureka Vacuum Cleaner Company

David Whitney Building

Detroit

Michigan



The **HUGHES** Electric HOTEL EQUIPMENT for

Hotels, Clubs, Cafeterias, Restaurants, etc.



Plate Warmer

Two standard sizes. Wattage, 1500 watts. Controlled by three-heat switch.



Urn Heater

Adjustable base to fit any size urn. Three-sizes: 1500, 1100 or 880 watts. Controlled by three-heat switch.



Broiler Two or three compartments as desired—broils several kinds of meats at one time—no interchange of odors.

An Opportunity For New Business and Larger Profits

Illustrated is a series of Hughes Electric Kitchen Equipment for hotels, clubs, cafeterias, restaurants, hospitals, asylums, institutions, etc.

This complete line offers Central Stations an unequalled opportunity in an entirely new field of operation.

For years the Hughes Electric Heating Company have been recognized as the foremost manufacturers of Electric Ranges. The name "Hughes" is known the world over for electric heating devices of quality and performance.

Every Central Station Salesman should make this his biggest year. The opportunity is here. Use it to its fullest extent.

Detailed descriptive literature furnished on request.

HUGHES ELECTRIC HEATING CO.

5660 West Taylor Street, Chicago

TORONTO

WINNIPEG

BOSTON



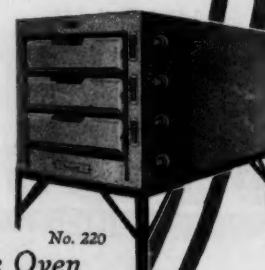
Toaster

Capacity, 16 slices. Wattage, 3 k. w. Controlled by three-heat switch.



Griddle

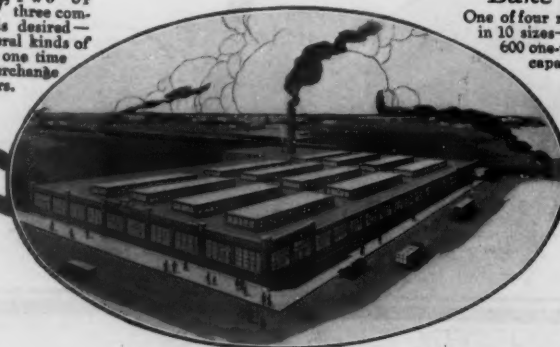
For meats, fish, cakes, etc. Wattage, 3 k. w. Controlled by three-heat switch.



No. 220

Bake Oven

One of four models made in 10 sizes—from 30 to 600 one-pound loaf capacity.



Why You Can Make More Sales With The DUMORE

Every woman sees the need of a sewing machine motor. Every woman wants one. And since woman is a bargainer by nature, she's going to look around before she buys and get the best motor for her money. When she sees the

DUMORE SEWING MACHINE MOTOR

—sees how practical it is, how quickly and firmly it can be attached, how it lowers, with the head, into the cabinet and how easily the speed is controlled—when she sees these advantages demonstrated and makes comparisons, the logical conclusion is to buy a Dumore. Retailers at the price of less efficient motors and gives you a better profit.

Universal motor operates on either direct or alternating current. Six speeds.

Let us send you a Dumore on approval. Show it to your customers, keep it 30 days and if you are not convinced that it's the best seller on the market, ship it back at our expense. Write us today—full information on request.

**WISCONSIN
ELECTRIC
COMPANY**

2602 Dumore
Bldg.
Racine
Wisconsin





Everybody knows

DURADUCT

(Reg. U. S. Patent Office)

by this box

The small sizes of Duraduct (2/8" and 1/4") are shipped in strong corrugated fibre boxes.

Therefore it reaches you in perfect condition without collecting freight car and station dirt.

The box also makes Duraduct easy to handle and stock.

All good jobbers have it.

TUBULAR WOVEN FABRIC COMPANY
 MANUFACTURERS — PAWTUCKET, R. I.
 GENERAL SALES AGENT — A HALL BERRY
 97 WARREN ST. NEW YORK — 950 CLINTON ST. CHICAGO.

Northern Electric Company Distributors for Canada
 LIMITED

THE BLACK DOTTED LINE IS THE MARK OF
 DURADUCT

*Officially Endorsed
for*

"WIRE YOUR HOME TIME"

The Society for Electrical Development is engaged in another nation-wide campaign for more business—"Wire Your Home Time" it is called this year.

Here is a book, officially endorsed for this campaign, which will help you to a share in this business.

WIRING OF FINISHED BUILDINGS

By Terrell Croft. \$2.00 net postpaid

"A bully good book," said the Society for Electrical Development in its official endorsement. It is all of that. It covers both the commercial and technical sides of the problem.

(1) How to get the business—examples of successful advertising and sales campaigns—the whole plan laid out for you.

(2) The best, most economical and up-to-date methods of installing wiring systems in finished buildings.

Equally good and even more useful for all wiring—all of the time.

WIRING FOR LIGHT AND POWER

Here at last is a really useful wiring handbook.

It is a complete commentary on the code with the best practical wiring data for practically all types of service.

There are 425 pages, setting forth both code requirements and wiring methods in simple, understandable language.

There are nearly 400 illustrations that are the best ever offered in such a book.

There is an index that is a marvel of completeness, so that you can locate instantly the code requirements and learn at once the best way to meet them. Flexible binding, \$2.00 net postpaid.



By the same Author—AMERICAN ELECTRICIANS' HANDBOOK

This is the handbook of electrical practice.

It covers the whole field of practical electrical work, fundamental principles, care and operation of electrical machinery, transformers' wiring and illumination.

700 pages, over 900 illustrations, leather, pocket size, \$3.00 net postpaid.

McGraw-Hill Book Co., Inc.
239 WEST 39TH STREET, NEW YORK

LONDON: HILL PUBLISHING CO., LTD.
6 & 8 BOUVERIE ST., E. C.

Publishers of Books for Electrical Merchandising

FREE EXAMINATION COUPON

McGraw-Hill Book Co., Inc.,
239 W. 39th St., New York, N. Y.

You may send me on 10 days' approval:

....Croft—Wiring of Finished Buildings, \$2.00 net.

....Croft—American Electricians' Handbook, \$3.00 net.

....Croft—Wiring for Light and Power, \$2.00 net.

I agree to pay for the books or return them postpaid within 10 days of receipt.

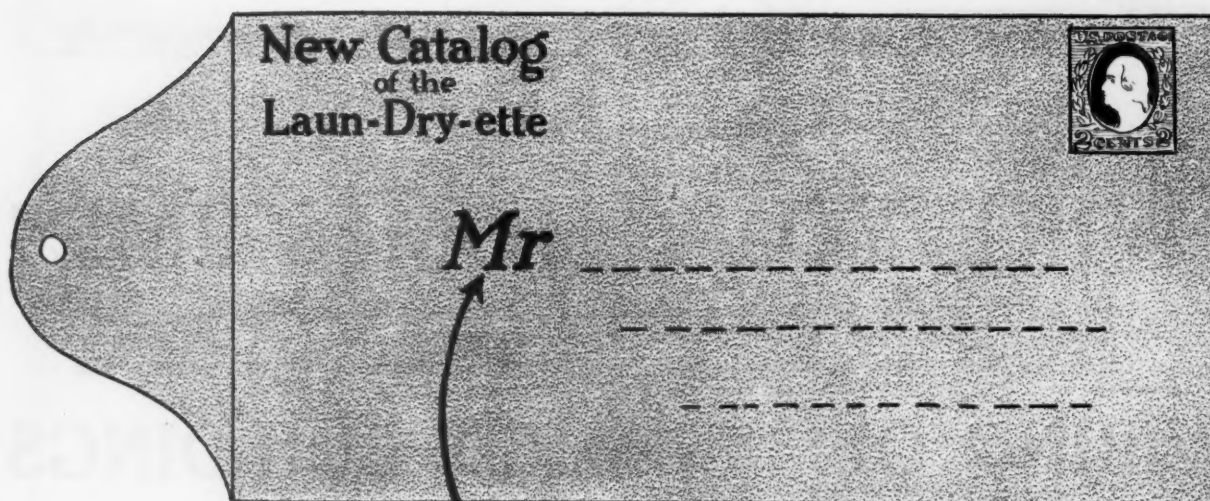
....I am a regular subscriber to the Electrical Merchandising.

(Signed)

(Address)

Reference..... E. M. Apr.

(Not required of subscribers to Electrical Merchandising. Books sent on approval to retail customers in the U. S. and Canada only.)



The New Laun-Dry-Ette Book is waiting for you

Put it
There
- and profit

The fact that the Laun-Dry-Ette differs from all other washing machines in principle, operation and construction means that it has the sales appeal of the novelty.

The fact that it has many real advantages over other types added to the novel design

means that sales arguments are clinchers. The new book on the Laun-Dry-Ette will show you what sales opportunities are in your territory.

To save your time just put your name and address on the envelope above—slip it in an envelope and drop it in the mail today.

Laun-Dry-Ette

Phantom View
Tub Lowered
Ready to Wash



Without rubbing or wringing or any other operations which quickly wear out fabrics, the Laun-Dry-Ette cleans the clothes and DRIES them.

In ten minutes a full tub can be washed and dried—anything from laces to comforts.

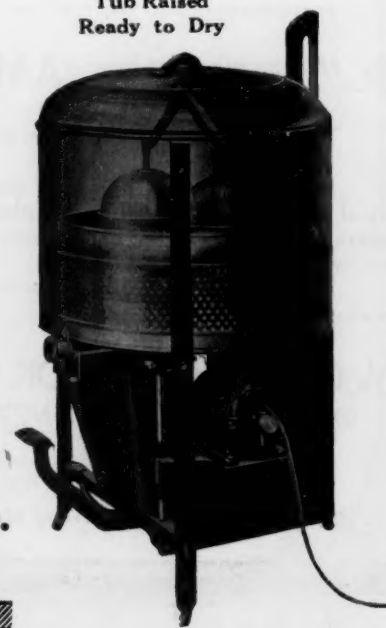
They stay sold because they are well made and guaranteed to operate satisfactorily.

If you want to handle a strictly 1917 product this year and reap the profit from a real seller—get our attractive proposition to dealers.

Just put your name on the envelope above.

The Home Specialty Co.
Cleveland, Ohio

Phantom View
Tub Raised
Ready to Dry



For Cleaner Profits and Real Satisfaction

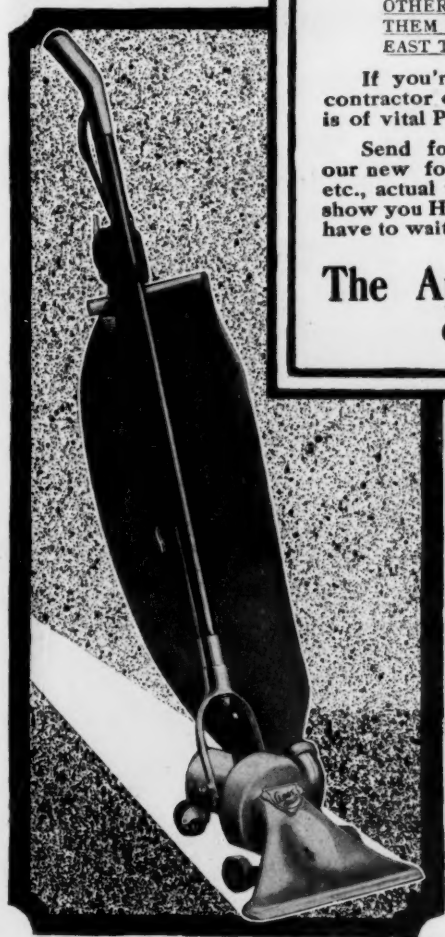


Licensed under
Kenney patents

TYPE A-3 APEX CLEANER

Retails for \$35.00

The popular model for average home use; has a double-passage nozzle, cleaning thoroughly and evenly over the 13-inch opening. Highest improved type,—powerful,—yet light and easy to handle. Gets ALL the dirt!



The Apex

Electric Suction Cleaners

OF COURSE you've heard about them; from Coast to Coast Dealers and Housewives are unanimously exclaiming—"It's the Shape of the Nozzle That Counts"—and that means APEX; the reason is plain.

TWO IMMENSELY PRACTICAL MODELS.—A TYPE FOR EVERY PURPOSE.—NO SALES LOST. BOTH HAVE THE EXCLUSIVE, LOW, POKING NOZZLES THAT CLEAN UNDER THINGS AS WELL AS AROUND THEM! THEN, TOO, MANY OTHER EXCLUSIVE FEATURES THAT MAKE THEM EASY TO SELL, EASY TO OPERATE, AND EASY TO KEEP IN TIP TOP WORKING ORDER.

If you're alive and progressive—whether dealer, contractor or central station—our APEX proposition is of vital PROFIT interest to you!

Send for our catalog, get our sales-helps,—see our new folders, newspaper electros, window-trims etc., actual tangible forms of sales co-operation. We show you HOW TO GO AFTER business—you don't have to wait for it to come to you! Write Today!

The Apex Electrical Mfg. Co.
CLEVELAND, OHIO



TYPE B-1 APEX CLEANER

Retails for \$50.00

A heavy duty cleaner for stores, halls, offices, etc., very powerful. Selfadjusting nozzle, traction-operated revolving brush: 35 sq. inches of suction area continually applied against the floor. Trade named the "Submarine" Cleaner because of its intense "Get Under Things" design.

WRITE OUR NEAREST DISTRIBUTOR FOR FULL PARTICULARS

ATLANTA, GA.	Baltimore Elec. Supply Co.,
BOSTON, MASS.	Wetmore-Savage Co.
BALTIMORE, MD.	Baltimore Elec. Supply Co.
CLEVELAND, OHIO	The Stroud-Michael Co.
CHICAGO, ILL.	Illinois Electric Co.
DENVER COLO.	The New England Electric Co.
DES MOINES, IA.	Mid-West Electric Co.
ELKHART, IND.	J. F. Fullerton, Factory Rep.
INDIANAPOLIS, IND.	Hathfield Electric Co.
KANSAS CITY, MO.	The B-R Elec. & Tel. Mfg. Co.
LINCOLN, NEB.	The Korsmeyer Co.
LOUISVILLE, KY.	Belknap Hardware & Mfg. Co.
LOS ANGELES, CALIF.	Illinois Electric Co.
MILWAUKEE, WIS.	Julius Andrae & Sons Co.
NEW HAVEN, CONN.	The Hessel & Hoppen Co.
NEW YORK CITY	Kimball Electrical Const. Co.
OMAHA, NEB.	Mid-West Electric Co.
PETERSBURG, VA.	Chas. Leonard Hdwe. Co., Inc.
PITTSBURGH, PA.	Doubleday-Hill Electric Co.
PHILADELPHIA, PA.	Frank H. Stewart Electric Co.
PORTLAND, ORE.	Fobes Supply Co.
ST. LOUIS, MO.	Wesco Supply Co.
SALT LAKE CITY, UT.	Inter-Mountain Electric Co.
SAN FRANCISCO, CALIF.	Elec. Ry. & Mfgs. Sup. Co.
WASHINGTON, D. C.	Doubleday-Hill Electric Co.

N. E. L. A.
Commercial Section Convention Number
OF
Electrical
Merchandising
Out May 15th, 1917

It will be more than a magazine—more than a catalogue.

It will be, in seven words, the Central Station Commercial Man's Annual Guide to Merchandising.

2935 Central Station Commercial Men—the men who sell and who **buy** the electrical appliances placed in service by over 2300 of the most progressive and aggressive lighting companies in this country—will read, study and **preserve** this great issue of

Electrical Merchandising

2766 of the liveliest, most successful Electrical Dealers, Jobbers and Contractors will utilize this issue as **their** guide to merchandise buying for many months to come.

The magazine last month reached 6740 paid-in-advance readers, **plus** 4351 copies for new subscribers, news stand sales, circulation promotion work, etc.—or a total of 11,091 altogether—and every one a **buyer** or a **seller** of electrical merchandise. This coming Convention Number will have even wider distribution.

It will offer an opportunity to readers and advertisers alike. The readers will find it an invaluable Electrical Merchandising and Store Equipment Guide. The advertisers will find it the most effective medium ever offered them for reaching the men who buy their goods **in order to sell them at a profit.**

Electrical Merchandising

McGraw-Hill Publishing Co., Inc.

239 West 39th Street, New York City



Floodlight the Flag

Right now, when patriotic sentiment is running high and everyone is displaying Old Glory, *floodlighting the flag* offers you a big opportunity. It's an idea that will win.

To insure satisfactory results use the X-RAY Projector. It contains an X-Ray reflector—the most powerful and only permanently efficient reflector made. Throws a 67,750 candlepower beam hundreds of feet with a 200-watt Mazda lamp.

Accessible—easily installed and regulated—compact—weatherproof—perfectly ventilated.

Floodlighting buildings, signs, night gangs, sports, industrial plants, etc., is a big, profitable and undeveloped field. Our engineers and service department will gladly co-operate to help you land more of this good business.

Valuable Book on Floodlighting FREE

Tells the possibilities for you in this newest development in lighting. Packed with practical data. Write for it today.

NATIONAL X-RAY REFLECTOR CO.

237 W. Jackson Blvd., Chicago 14 W. 46th St., New York



Are You Selling the Best Line of Vibrators?



The Shelton Vibrator

(over 100,000 in use)

is trouble proof, there are no "come backs" for service repairs. The profits you make you KEEP and you have a pleased customer always.

The Shelton is the favorite with the big barber shops the country over—this is where a Vibrator is on duty twelve hours a day.

The Vibrator that stands such service is dependable for your customers.

Retail prices—\$16.50 and upwards.

Stock this line for permanent profits.

SHELTON ELECTRIC CO.

Factory: Fort Wayne, Indiana, U. S. A.

New York Boston
 30 East Forty-second St. 101 Tremont St.
 San Francisco
 62 Post St.



The Unit of Day Brightness!

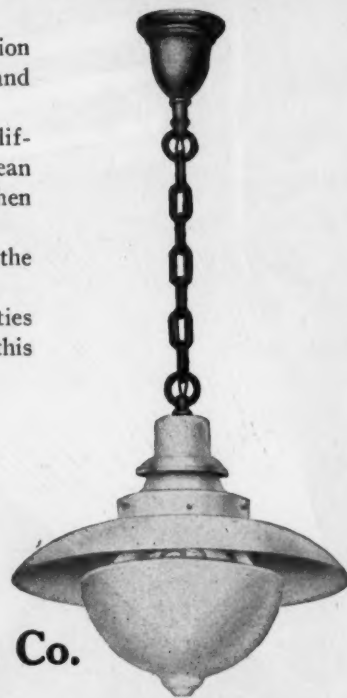


The **DENZAR** has made easy the solution of lighting problems in the commercial and industrial field.

The **DENZAR** eliminates shadows and diffuses all the light. It is built to stay clean for a long time, but is easy to clean when necessary.

We will be pleased to tell you why the **DENZAR** is a repeat order unit.

Every town presents great sales possibilities for the Denzar. Let us help you get this business.



Beardslee Chandelier Mfg. Co.
221 South Jefferson St., Chicago, Ill.

"VANCO BRONZE"

A recent development of importance to the lighting industry—backed by a manufacturer having fifty years' experience in combining art and metal into lighting fixtures.

Our staff of designers, notable as artists on Mitchell Vance fixtures, understand the art of creating effects.

Vanco Bronze is produced at a comparatively low cost because this metal results in practically perfect pieces. No flaws to be patched, no high cost to prepare the surface for finish—a minimum of hand work.

In weight, durability and adaptability to modeling Vanco Bronze, while similar in many respects, is superior to the metals used in the past.



Vanco Bronze lighting fixtures will be handled by dealers in good standing, one in each locality, and every dealer throughout the country will find it to his advantage to take on this profitable, design patent protected line.

The value of design patents is receiving an increasing appreciation. A dealer bidding, therefore, on Vanco Bronze fixtures is not subject to the

usual competition.

Vanco Bronze is furnished not only in the standard finishes but in many new and beautiful effects that have not heretofore been possible.

Delivery service is of the utmost importance. We will deliver any quantity in one week—just think of it!

THE MITCHELL VANCE CO.

Factory:
503-11 W. 24th Street
Near 10th Ave.

NEW YORK

Showrooms:
294 Madison Ave. at 41st St.
One block from Grand Central Station

I am Dr. Dyno—

specialist on good commutation. These are my seven assistants. I will sell "Seven-in-One"—the commutator cleaner *perfect*—for you. I am ready to visit your customers. *Do you want my services?*

My Seven Assistants Eliminate:—

1. Sparking
2. Firing
3. Heating
4. Cutting
5. Surface Shorts
6. Oil Shorts
7. Sandpaper

Write for Our
Exclusive Agency
Proposition

DYNO
UTILITIES MFG. CO.
608 S. Dearborn Street
CHICAGO



1917 FANS OF MERIT

A-B Gyrofans and Oscillating Fans

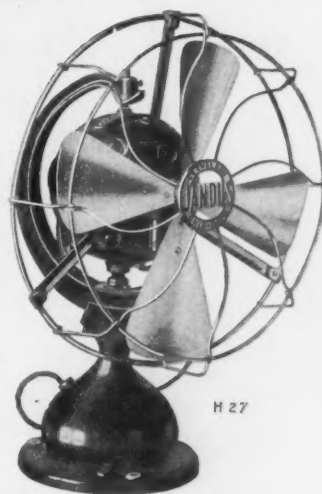


The A-B Gyrofan

is the original—improved with years of service.

There are many places indeed where the A-B Gyrofan will give better results than any other form of ventilation.

And the A-B oscillating fan has proved its worth in ruggedness and value in service.



If you do not have A-B Bulletins, write. Order your fans now

The Adams-Bagnall Electric Co., Cleveland, Ohio

Manufacturers of
Electrical Apparatus with both
Merchandising and Engineering Merit

Industrial, Commercial and Street Lighting Equipment;
Lighting, Power and Constant-Current Transformers;
Gyrofans; Oscillating Fans; Auto Electrical Accessories

Write now for data or quotation on your requirements!

Efficiency in Merchandising

requires the utmost efficiency in lighting.

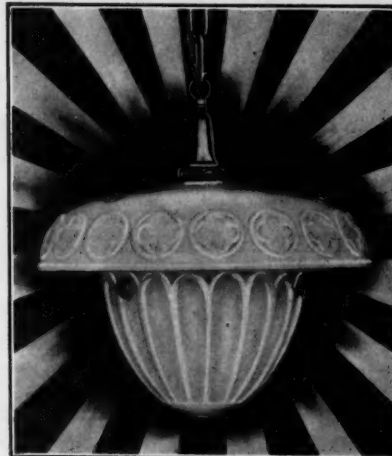
Beauty and quality, with the highest lighting value, are required by you in your own place of business. Other merchants have the same needs.

CORA "Double Efficiency" UNIT

is a most effective lighting fixture for your own use—for the use of your customers.

The handsome design of this Unit, its supreme lighting efficiency, together with the beauty and unvarying high quality of Cora Glass, have established the "Double Efficiency" Unit as a most remarkable seller.

Shall we send you prices?



No. 1643½ "Double Efficiency"

No. 1639½—11" Reflector with 6½" Bowl

No. 1641½—13" Reflector with 8" Bowl

No. 1643½—17" Reflector with 10" Bowl

Consolidated Lamp & Glass Co., Coraopolis, Pa.

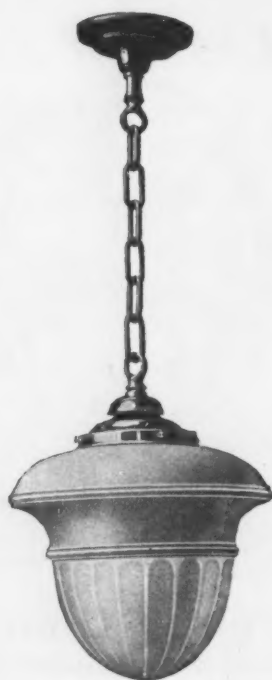
NEW YORK, N. Y.
66 West Broadway.
CHICAGO, ILL.
17 No. Wabash Ave.

PHILADELPHIA, PA.
684 Arch Street
CINCINNATI, OHIO.
141 East 4th Street.

BOSTON, MASS.
104 Federal Street.
PITTSBURGH, PA.
702 2d Nat. Bk. Bldg.

BUFFALO, N. Y.
525 Main Street.
PORTLAND, ORE.
233 Sherlock Bldg.

HAMILTON, ONT.
62 King Street East.
LOS ANGELES, CAL.
347 Pacific Elec. Bldg.



REGENT GLASS WARE



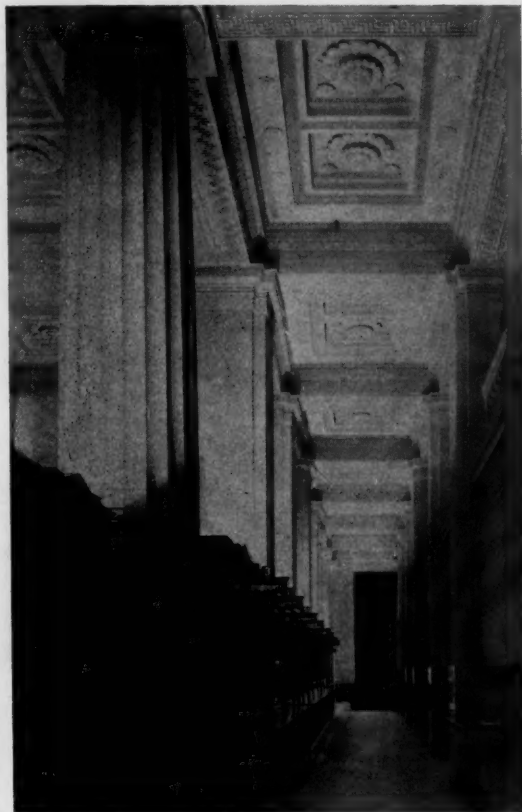
A NEW UNIT FOR STORE LIGHTING

THE tendency in store lighting today is toward large, imposing units. The attractive No. 01414 shown here is designed to meet this demand. It is 14 inches in diameter, and is made of our white Yural glass. The globe is simple in design, gives a well-diffused illumination, and will look well in almost any scheme of interior decoration. It is completely enclosing, and should be used with 300, 400, or 500-watt lamps.

IVANHOE-REGENT WORKS

of General Electric Co.
CLEVELAND, OHIO

For all Canadian business refer to
Canadian General Electric Co., Limited, Toronto, Ont.



Illumination De Luxe

METROPOLITAN BANK, NEW YORK

An example of the effect obtained by the Frink System of indirect illumination.

Our system of scientific illumination of working surfaces is now installed in many prominent buildings throughout the country.

We design and produce special lighting effects of every description, co-operating with the contractor and central station.

Catalog on request.

I. P. FRINK, Inc.

24th St. and 10th Ave., New York City

BOSTON, MASS.
55-61 High St.
CHICAGO, ILL.
173 W. Jackson Blvd.
CLEVELAND, OHIO
813 Superior Ave., N. W.
MONTREAL, QUE.
450-452 St. James St.

DETROIT, MICH.
72 Jefferson Ave.
PHILADELPHIA, PA.
210-212 No. Broad St.
PITTSBURGH, PA.
100-102 Wood St.
TORONTO, ONT.
19 Front St., East

ST. LOUIS, MO.
501-505 No. Third St.
SAN FRANCISCO, CAL.
Second and Howard Sts.
SEATTLE, WASH.
1020 First Ave., South
WINNIPEG, MAN.
385 Portage Ave.



Made by
one of the
largest
makers of
sweepers in
the world.

WE KNOW
HOW!

The
Torrington
ELECTRIC VAC

**is going to be the
most talked-about
vacuum cleaner in
America!**

Because, in our 17 years' experience in making sweepers and cleaners, we have learned the demand—we have designed and built a vacuum cleaner that *meets* the demand—and we are now *spreading the news* about this cleaner in millions of issues of popular magazines.

The Ladies' Home Journal, the Delineator, the Designer, Good Housekeeping, Woman's Magazine—THESE are the papers that are going to send the people into your store. Now listen. When you consider that the Torrington isn't cheaply built—that it has a G-E MOTOR, a genuine *carpet-sweeper* brush, a *nozzle* that gets into nooks and corners, you begin to realize what there is in it for you. NOW, while the demand is piling up, is the time to get in touch with us. Let us show you details—we're certain the rest will follow—and that means profits.

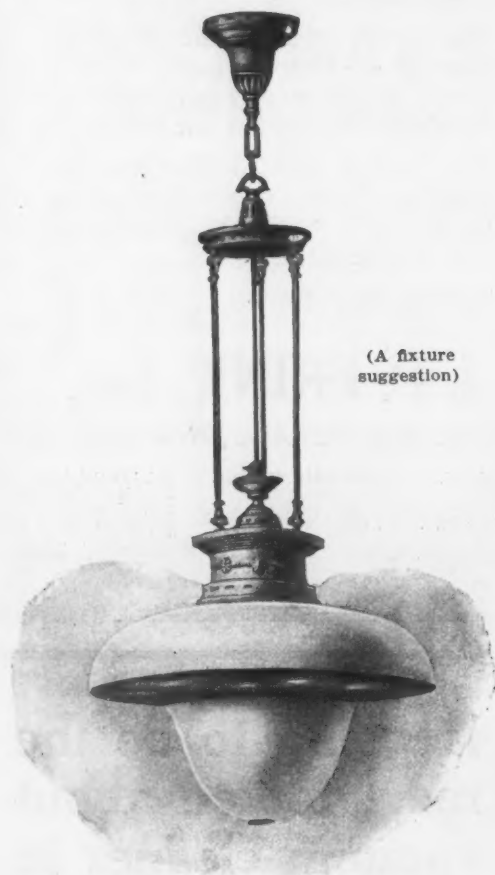
NATIONAL SWEEPER CO.

190 Laurel Street

TORRINGTON, CONN.

A Distinctive New Feature

in "semi-indirects"



(A fixture
suggestion)

Phenixlite 11812

(Patented)

A one-piece unit. The upper and lower reflectors being finished in dense white enamel combine in directing the light downward and outward through the CLEAR glass band which lies between.

This new feature produces a highly efficient and glareless unit which is dustproof and bugproof.

A profitable feature is that it *sells itself*.

Send for the 11812 booklet.

The Phoenix Glass Co.

New York
Pittsburgh

Chicago
Boston



Design Patented)

BAYLEY'S EQUALITE

No. 4952-E

a highly ornamental and efficient unit embodying the addition of a roof to the former type of "dish only." Three essential features are obtained by this addition:

The elimination of ceiling shadows.

The elimination of dust collecting in the dish.

Higher illumination intensity on the working plane.

Stock size 22"; larger or smaller sizes made on special request.

This type of fixture has been adopted in New York City by the Mirror Candy Company chain stores and is proving highly satisfactory.

BAYLEY & SONS, Inc.

Designers and Makers of Fine Lighting Fixtures

FACTORY
117 VANDERVEER ST.
BROOKLYN, N. Y.

SALES DEPT.
103 PARK AVE.
NEW YORK



Pittsburgh "Six"

The little fan that will mean big business for you this summer

The demand now is for small fans and attractive fans.

The Pittsburgh "Six" is a little beauty.

It weighs only $3\frac{3}{4}$ lbs. Blades 6 inches. It has a high grade universal motor. It is efficient. It is simple. It is durable.

It's the kind of fan that will make the fan prospect come in and buy when he sees it in your window.

Carry it in full nickel, as well as black and brass finish.

You'll be surprised how many people will be glad to pay \$2.00 extra for beauty's sake.

Other types that should be in your stock:

Pittsburgh "Eight"

the Square Base Fan—8 inch blades—universal motor—combined desk and wall type—full nickel or black and brass finish, three speeds or single speed.

Pittsburgh "Little Giant"

the Traveler's Fan—4 inch blades—weight $2\frac{1}{2}$ lbs.—full nickel or black and brass finish.

Order now and prepare for a big business in 4-inch, 6-inch and 8-inch fans.

Pittsburgh Electric Specialties Co.
Pittsburgh, Pa.

Where Lamps Talk Dollar Bills—



Don't get the idea that selling lamps is small business. There is more to it than just the refilling of sockets in the house or office, store or factory. If you sell

FRANKLIN Mazda Lamps

you can go after bigger opportunities—those factories and business buildings where an improvement in the lamp talks dollar bills. It is a man-size business, with a man-size profit for the agent with the best lamp.

The other men who sell the Franklin Mazda are developing this kind of business steadily. They have a lamp that is perfection, backed by a personal service and support that turns the customer into a friend. They talk dollar bills and make good on what they say—and so can you.

Write to us now.

The Franklin Electric Mfg. Co.

Hartford, Conn.

Remember—
The Name of Franklin
Helps You Sell.....



FARIES FIXTURES



Flexible Arm

—No adjustment screws
to bother with

← Bushing riveted to standard
prevents turning

Extra Heavy Base

—Felt on bottom
Can't tip over

Convenience

—the *strong* point of this FARIES Portable (No. 153) is the *weak* point of nine out of ten buyers. Show a man an article that is easy to use—an article that contributes constantly to ease and comfort—and he'll want it. *That's* why the

FARIES Portable No. 153

is so easy to sell. The Flexible Arm used on this portable is the *best* without exception. It is made to withstand the hardest usage. You want *service*, and service is what you get when you buy this portable equipped with this scientifically made flexible arm. It's CONVENIENT. Turn it this way and that—bend it up—down—side-ways—no matter how—it stays put—WITHOUT BOTHERING TO ADJUST ANYTHING.

Demonstrate FARIES No. 153 to your customers—its salability will gratify you.

For our complete line get Catalog No. 24. Sent on request.

FARIES MFG. CO.
DECATUR, ILL.

One of Our Latest Designs in Cast Metal

Send for
Illustrations of
the Full Line.

**E. P. Gleason
Mfg. Co.**
37-39 Murray St.
New York City

No. 5131—
Cast Metal
Bronze Gold
finish, 14 in.
dish, 2 semi-
indirect and
4 direct lights.
Length 36 in.,
spread 18 in.



Mechanical Displays

Without

Mechanism



The

ROTO-LUMINOUS Advertising Display

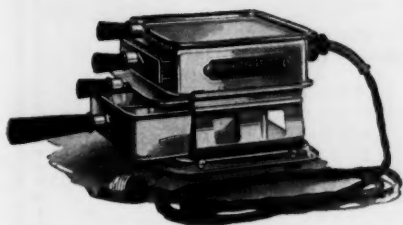
Both illumination and motion without clock work or motors. Adaptable to any product. Easily set up—requires no attention. Trifling cost—but a little more than an ORDINARY cut-out. It is THE Display of Displays. Write now for details.

Manufacturing Licensees:

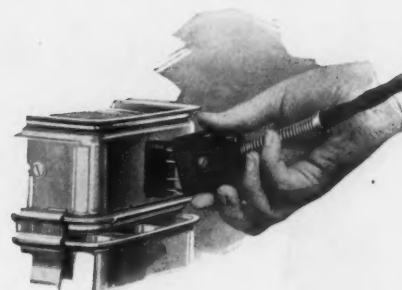
EDWARDS & DEUTSCH LITHO. CO., CHICAGO
GALLOWAY LITHO. CO., SAN FRANCISCO, CAL.
NIAGARA LITHO. CO., NEW YORK CITY

GEO. MADISON CO., 220 Broadway, New York City
Patentees and Owners

STANDARD TABLE STOVE



The Very Newest
Thing in
Electric
Appliances

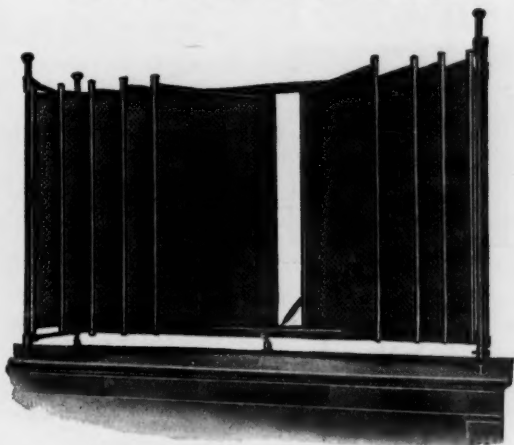


THREE DISTINCT COOKING OPERATIONS AT ONE TIME
TOAST BOTH SIDES OF BREAD AT ONCE
EGG POACHING ATTACHMENT
A CONNECTING PLUG THAT REALLY NEVER STICKS

ASK US ABOUT IT

THE STANDARD STAMPING CO., Marysville, Ohio

When the Clerks Are Busy
—the customer can sell himself



The UNIVERSAL Wing Displayor

answers the hundred and one questions that eat up
salesmen's time
—while the customer waits he can
look over stock and sell himself.
—he uses up a minimum of his own
and the salesman's time.
Pays a triple dividend
—satisfies the customer
—saves clerk's time
—increase your display space.

Write us for data and details

UNIVERSAL FIXTURE CORPORATION
129 W. 23rd St. New York

VIDOR^{New York City}-NY.

For

Fuses, Flashlights,
Cases, Batteries,
Bulbs, Lenses,
Plugs; Carbon,
Nitrogen and Tung-
sten Lamps. Auto-
mobile Accessories,
Bethlehem Five
Point Spark Plugs,
Electro Radiators,
Etc.

Vidor service is
profitable for Job-
bers and Dealers
in any part of the
United States.

He buys and
sells electrical
and auto supplies
—in large quanti-
ties.

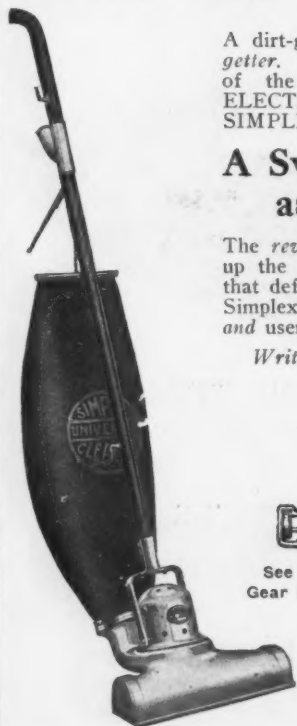
Vidor quotation
on your require-
ments for any-
thing electrical will
prove its value in
your business.

Write for quotations

Sole distributor for A. F. Daum
refillable cartridge fuses

WILLIAM H. VIDOR
295 Fifth Ave., New York

1917 Model SIMPLEX ELECTRIC CLEANER

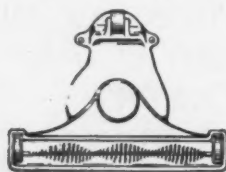


A dirt-getter that is a *business-getter*. Write us for endorsement of the new 1917 SIMPLEX ELECTRIC CLEANER. The SIMPLEX is

A Sweeper as well as a Cleaner

The *revolving spiral brush* picks up the clinging lint and threads that defy ordinary cleaners. The Simplex is a *winner*—for dealers and users. Get our proposition.

Write for Territory NOW.



See that Revolving Brush.
Gear Driven. 12½ Inch Nozzle.

THE
RAMEY MFG. CO.
Columbus, Ohio



Supply and Demand

For the spring season our entire output has been contracted for.

WE CANNOT TAKE ON ANY NEW DEALERS WITHOUT A SACRIFICE OF ROYAL QUALITY AND SERVICE—SOMETHING WE WILL NEVER DO.

Naturally—we want all the dealers we can get—but we do not want more than we can serve well.

Present Royal Dealers will receive the full limit of Royal Intensified Service and co-operation.

FOR THE FALL SEASON WE WILL BE PREPARED TO FILL THE REQUIREMENTS OF THE MANY DEALERS WHO NOW RECOGNIZE THE MONEY-MAKING POSSIBILITIES OF ROYAL CLEANERS.

THE P. A. GEIER COMPANY
5121 St. Clair Ave., Cleveland, Ohio

Strong Profit Points

of the



"American Beauty Iron"

THE BEST IRON MADE

Its easy selling qualities—made possible by its superior mechanical construction, its pleasing and attractive appearance and the fact of its being universally known as the "Best Iron Made"—tend to make for quick stock turning and quick stock turning is the source of quick profits. Certainly this interests you? Let us tell you about them and put you on

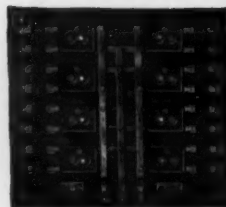
The road to more profit

We make a varied line of electric household and industrial devices. May we send you an illustrated price list and discounts?

American Electrical Heater Company
Detroit, U. S. A.

Oldest and Largest Makers in the World

Use Standard Panels



For Push Switches

for N. E. C. and plug fuses—knife, snap or push switches.

In many cases Standard Panels can be used instead of special designs.

Consult our Standard Panel Lists and you in many instances will be saved the trouble, delay and expense incident to drawing specifications.

Through feed panels can be eliminated by tapping off the mains to the Terminal lugs of a STANDARD PANEL.

See Cat. 10 pages 94-155

"Circle T"

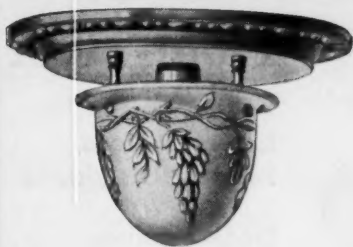


Standard Panels

The Trumbull Electric Mfg. Co.
Plainville, Conn.

BRASCOLITE

DIFFUSION PLUS REFLECTION



Wire Your Home Time

is especially opportune to introduce to your trade the new line of residence Brascolites. They combine beauty with lighting efficiency in a way which sells them at sight.

We have some very attractive literature in colors which is yours for the asking.

Luminous Unit Co.

St. Louis, Mo.

New York
30 Church St.
Boston
223 Old South Bldg.

San Francisco
639 Market St.

Chicago
19-S. 5th Ave.
Philadelphia
1020 Land Title Bldg.

"UNION" ELECTRICAL PROTECTING MATERIAL

A Good Fuse is like Reliable Insurance, not an Expense but an Investment, and proves itself so in time of need by giving the protection paid for.



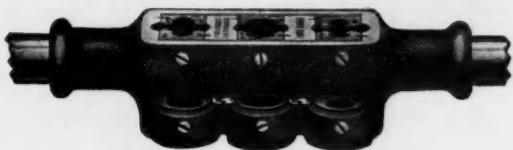
"Union" Fuses are made to safely carry their specified load but to promptly and safely open the circuit when the prescribed overload is reached. Opening on less current would be a needless expense to the user, and requiring more would rob him of the protection that he has a right to expect for his apparatus.

Write for Catalog No. 28

CHICAGO FUSE MFG. CO.

CHICAGO NEW YORK

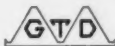
For Conduit Threading



The TRIO Die Stock

Save your time and patience by having all your dies in *one* stock. No loose dies or parts to hunt up and assemble.

The TRIO contains three cutting sizes of Little Giant pipe dies all adjusted ready to use.



Greenfield Tap and Die Corporation

Greenfield, Mass.

New York Chicago
Galt, Ont., Canada



Send for No. 37 Catalog
of Screw Cutting Tools

"Safe?"

"Why, you can put your hand in it!"



You can let your errand boy use this material without risk—it etches the glass—eats out the silica—but it won't injure or burn the user in any way.



for frosting lamps or etching glass of any kind, for any purpose, has no equal. Does the work better, cheaper, quicker—and it's safe.

Order a trial lot—put up in 5 lb. and 10 lb. containers.

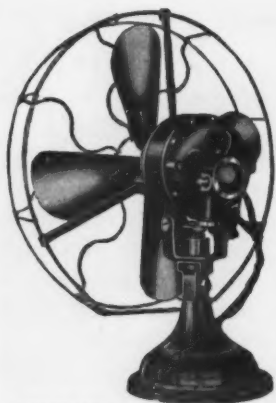
Union Electric Company

Sole Selling Agents for United States

Terminal Warehouses, Pittsburgh, Pa.

Canadian Sales Agents
Northern Electric Company, Ltd.

Just turn a
Century
Alternating Current Fan



Illustrating a 16 inch oscillator

on its swivel
stud when
you want to
change the
direction of
air blast, no
need to lift
it.

*Write if you have not received
1917 price lists*

Century Electric Company

St. Louis, U. S. A.

Sales Offices in Principal Cities

257



Hold-Heet

High Quality
Lowest Prices
Largest Discounts

Dealer Prices

One Heat Pad.....	\$2.34
Three Heat Pads....	4.33
Toaster Stove	1.66
Jr. Sold. Iron.....	2.80
No. 7 Perc. 7 Cup...	4.33
Comb-Die Cast	1.66
Curling Iron	1.66
Immersion	2.00
1000 W. Radiator....	4.66
6" Disc Stove.....	3.00
Vert. Toaster	2.17

The Hold-Heet selling plan
will make money for you.

Write for full information
and the name of nearest
jobber.



Russell Electric Co., 140 W. Austin Ave., Chicago

Dress Up Your Windows—Show Your Patriotism

Complete line of Novelties for
Window Display Work.

EAGLES, SHIELDS, WILSON
PLACQUES, RED, WHITE &
BLUE CHENILLE ROPING,
ETC.

Send for Catalogue.
Dept. K.

Doty & Scrimgeour Sales Co., Inc.
74 Duane Street New York

TESTS

ELECTRICAL TESTING LABORATORIES
80th Street and East End Avenue New York, N. Y.

This is the Guide for the Buyer in the Market for Electrical Merchandise

Those concerns which advertise in Electrical Merchandising put their products in the Spot-light of Publicity and live up to the claims they make. They are listed below.

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- | | | | |
|---|--|---|---|
| <p>Automobile Accessories.
Vidor, William H.</p> <p>Batteries, Dry.
Interstate Electric Novelty Co.
Vidor, William H.
Western Electric Co.</p> <p>Books, Electrical and Technical.
McGraw-Hill Book Co.</p> <p>Boxes, Fuse.
General Electric Co.</p> <p>Boxes, Junction and Outlet.
General Electric Co.</p> <p>Cable Clamps.
Union Elec. Co.</p> <p>Chains, Silent Driving.
Link Belt Co.</p> <p>Chandeliers.
Beardslee Chandelier Mfg. Co.
Benjamin Elec. Mfg. Co.</p> <p>Circuit Breakers.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Cleats.
Pass & Seymour, Inc.</p> <p>Clusters.
Benjamin Elec. Mfg. Co.
Federal Sign System (Electric).</p> <p>Commutator Cleaners.
Dyno Utilities Mfg. Co.</p> <p>Conduit, Flexible.
Tubular Woven Fabric Co.</p> <p>Conduit, Interior.
Tubular Woven Fabric Co.</p> <p>Conduit Fittings.
Pass & Seymour, Inc.</p> <p>Controllers, Motor.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Cooking Appliances, Electric.
American Electrical Heater Co.
General Electric Co.
Hotpoint Elec. Heating Co.
Landers, Frary & Clark.
Russell Electric Co.
Standard Stamping Co.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Displays, Electric.
Century Mfg. Co.</p> <p>Displays, Mechanical.
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Universal Fixture Co.</p> <p>Fan Motors.
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Century Electric Co.
General Electric Co.
Gilbert & Co., A. C.
Robbins & Myers Co., The.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Fans, Exhaust and Ventilating.
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Adams-Bagnall Electric Co.
Beardslee Chandelier Mfg. Co.
Benjamin Elec. Mfg. Co.
Faries Mfg. Co.
Federal Sign System (Electric).
Mitchell Vance Co.</p> <p>Flashlights.
Interstate Electric Novelty Co.</p> | <p>Fuses.
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General Electric Co.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Fuses, Refillable.
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Phoenix Glass Co.</p> <p>Glassware, Lighting.
Consolidated Lamp & Glass Co.
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National X Ray Reflector Co.</p> <p>Globes, Shades, etc.
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Bayley & Sons, Inc.
Century Mfg. Co.
Consolidated Lamp & Glass Co.
Faries Mfg. Co.
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Phoenix Glass Co.</p> <p>Heating Devices, Electric.
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Landers, Frary & Clark.
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Western Electric Co.
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Westinghouse El. & Mfg. Co.</p> <p>Insulating Materials.
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Westinghouse El. & Mfg. Co.</p> <p>Ironing Machines, Electric.
Hurley Machine Co.</p> <p>Irons, Electric.
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Pittsburgh Electric Specialties Co.
Westinghouse El. & Mfg. Co.</p> <p>Lamp Locks.
Pass & Seymour, Inc.</p> <p>Lamps, Arc.
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Westinghouse Lamp Co.</p> <p>Lamps, Portable.
Faries Mfg. Co.
Century Mfg. Co.
Phoenix Glass Co.
Uno-Lite Co. of America.</p> <p>Lanterns, Battery.
Interstate Electric Novelty Co.</p> <p>Lighting Units.
Beardslee Chandelier Mfg. Co.
General Electric Co.
Luminous Units.
Universal Fixture Corp.
Westinghouse El. & Mfg. Co.</p> | <p>Line Material.
General Electric Co.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Motors, A. C.
Century Electric Co.
General Electric Co.
Robbins & Myers Co., The.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Motors, D. C.
General Electric Co.
Robbins & Myers Co., The.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Motors, Fractional H. P.
Westinghouse El. & Mfg. Co.
Wisconsin Electric Co.</p> <p>Panel-boards.
Adams-Bagnall Electric Co.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Plugs, Attachment.
Pass & Seymour, Inc.</p> <p>Pole Line Hardware.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Protective Devices, Electric.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Ranges, Electric.
General Electric Co.
Hughes Electric Heating Co.
Westinghouse El. & Mfg. Co.</p> <p>Receptacles.
Benjamin Elec. Mfg. Co.
General Electric Co.
Pass & Seymour, Inc.</p> <p>Receptacles, Sign.
Federal Sign System (Electric).
Gleason Mfg. Co., E. P.
Westinghouse El. & Mfg. Co.</p> <p>Rectifiers, Mercury Arc.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Reflectors.
Adams-Bagnall Electric Co.
Frink, Inc., I. P.
General Electric Co.
Ivanhoe Regent Work.
National X-Ray Reflector Co.
Phoenix Glass Co.
A. B. Wilson Co.</p> <p>Resistance Units.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Rheostats.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Roller Chains.
Chain Belt Co.</p> <p>Rosettes.
Pass & Seymour, Inc.</p> <p>Searchlights, Electric Auto, Etc.
Pittsburgh Electric Specialties Co.</p> <p>Shade Holders.
Adams-Bagnall Electric Co.
A. B. Wilson Co.</p> <p>Signs, Electric.
Century Mfg. Co.
Federal Sign System (Electric).
National X-Ray Reflector Co.</p> <p>Sign Letters.
Federal Sign System (Electric).</p> <p>Sirens, Motor.
Federal Sign System (Electric).</p> | <p>Sockets.
Benjamin Elec. Mfg. Co.
General Electric Co.
Pass & Seymour, Inc.</p> <p>Sprockets, Silent Chain.
Link Belt Co.</p> <p>Stoves, Electric.
Hughes Electric Heating Co.</p> <p>Supplies, Electrical.
General Electric Co.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Switchboard Fittings.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Switchboards.
General Electric Co.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Switches.
General Electric Co.
Pass & Seymour, Inc.
Westinghouse El. & Mfg. Co.</p> <p>Switches, Time.
Westinghouse El. & Mfg. Co.</p> <p>Taps and Dies.
Greenfield Tap & Die Corp.</p> <p>Telephones.
Western Electric Co.</p> <p>Testing Laboratories.
Electrical Testing Laboratories.
Westinghouse El. & Mfg. Co.</p> <p>Testing Service, Electrical.
Electrical Testing Laboratories.</p> <p>Theater Dimmers.
General Electric Co.</p> <p>Tools, Linemen's.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Tools, Portable Electric.
Wisconsin Electric Co.</p> <p>Transmission, Machinery.
Link Belt Co.</p> <p>Transmission, Silent Chain.
Link Belt Co.</p> <p>Transformers.
Adams-Bagnall Electric Co.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Vacuum Cleaners, Electric.
Apex Electrical Mfg. Co.
Eureka Vacuum Cleaner Co.
Hoover Suction Sweeper Co.
Hotpoint Elec. Heating Co.
Hurley Machine Co.
Innovation Electric Co.
National Sweeper Co.
Ramey Mfg. Co.
United Electric Co.
Western Electric Co.
Wisconsin Electric Co.</p> <p>Vibrators.
Shelton Electric Co.</p> <p>Washing Machines, Electric.
Brokaw-Eden Mfg. Co.
Home Specialty Co.
Hurley Machine Co.
Western Electric Co.</p> <p>Window Displays.
Doty & Scrimgeour Sales Co.</p> <p>Wires and Cables.
General Electric Co.
Electric Cable Co.
Western Electric Co.</p> <p>Wiring Devices.
General Electric Co.</p> |
|---|--|---|---|

Save This Issue Because—It is the intention of the publishers of *Electrical Merchandising* shortly to present a new form of index of unusual value to readers. To get full benefit from it, it will be necessary for you to save each issue.

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SEARCHLIGHT SECTION

FOR SALE

Beware of the Junk Pile

The junk pile is the last resort—a little For Sale ad in this Searchlight Section should be the first and most profitable means of getting money for used equipment. An investment of \$1.50 may bring you some real returns. It has done this for others.

Stock Taking Time

Now is the time to turn the surplus stock of metals you have on hand into cash. We buy all grades of scrap metals, small lots as well as large lots. Write us today and tell us what you have and we will be pleased to quote you prices. National Metal & Rubber Company, 30-31 India Wharf, Boston, Mass.

BUSINESS OPPORTUNITIES

Established Business for Sale

The best electric wiring and fixture shop in Milwaukee. Established 20 years; large trade in city and state. Other interests demand our attention. Will sell cheap. A great opportunity. Address Henry J. Wright, Apartment 5, 150 Biddle St., Milwaukee, Wis.

POSITIONS WANTED

Salesman Wants Position

Graduate electrical engineer traveling Virginia and West Virginia desires position on road with jobber or manufacturer, preferably on commission. Experience, testing and selling on road. Box 46, Elec. Merchandising, Real Estate Trust Bldg., Philadelphia, Pa.

New Business Manager Wants Position

Wanted—A position as new business manager by a man now managing the new business department of a combination company. Desires to concentrate efforts along electric lines only. Have had 4 years' experience in central station, commercial practice on different properties of one of the largest public service companies in the country. Box 48, Elec. Merchandising, Old Colony Bldg., Chicago, Ill.

POSITIONS VACANT

Salesman Wanted

No. A1 salesman having sound knowledge of illuminating engineering wanted to sell efficient glassware in connection with lighting service. Important territories to be covered. Good income and commission on sales. Write, giving references and detail of previous experience. Box 43, Elec. Merchandising.

POSITIONS VACANT

Sign Salesmen Wanted

Real sign salesmen (not mere order takers) with ability to sketch at least in the rough and with imagination. Address, with references, Box 35, Elec. Merchandising, 501 Rialto Bldg., San Francisco, Cal.

Power Salesman Wanted

The E. E. I. Co. of Brooklyn requires the services of two (2) high class power salesmen capable of handling large propositions. Good opportunity for right men. Address, giving qualifications and experience. T. I. Jones, General Sales Agent, 360 Pearl St., Brooklyn, N. Y.

MISCELLANEOUS WANTS

Electricians and Armature Winders

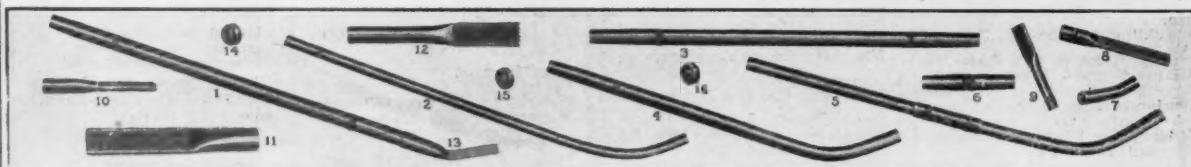
Send \$1 for 14 blue prints of motor windings, 10 A.C., single, two and three phase and 4 D.C. or set of 20 A.C., 4 D.C. and 4 rotary converter drawings, \$1.60. Winding made easy. Martin Elec. Co., 329 Irvington Place, Denver, Col.

AGENTS AND SALESMEN

New York Agency Wanted

For good specialty or line. Long acquaintance with retailers, jobbers, engineers, architects. Maintain own office. Box 49, Elec. Merchandising.

THE SAFEST, LIGHTEST, MOST DURABLE AND RELIABLE MADE



Can you use what we have said in selling Electric Cleaners? You cannot UNLESS the machine is equipped with SPAULDING'S Hard Fibre Attachments. Metal and wood are conductors of electricity—they are dangerous, SPAULDING'S Hard Fibre Attachments are insulators—they are safe. They are lighter than metal, stronger than wood, more durable than either as they will not dent, chip or tarnish, and any reliable manufacturer of Electric Cleaners can furnish them.

J. SPAULDING & SONS CO., Tonawanda, N. Y.

449 Broome St., New York, N. Y.

406 Bessemer Bldg., Pittsburg, Pa.

166 No. Clinton St., Chicago, Ill.

**MATERIAL for
DEALER'S STORE**

Lithographed
Cut-Out -

Hot Weather
Window Poster

Attractive
Folders

Newspaper Ads.

Polar Cub
prepares the
Ads that will
bring sales
to your store



**ADVERTISING
SCHEDULE**

The Saturday
Evening Post

Collier's

Literary Digest

System

Polar Cub

REG. U.S. PAT. OFF.

Electric Fan

Polar Cub has a big advertising campaign afoot! It will push the perspiring thousands over your doorstep to buy \$5 Polar Cub electric fans! Every fan a profit to you of \$1.25!

He will use big space in *Saturday Evening Post*, *Collier's*, *Literary Digest* and *System*, and free advertising help for your store!

Polar Cub is better value than ever. But still sells for only \$5!

It now has two speeds and stop; die-cast frame; bearings an integral part of frame; can't get out of alignment. Wonderfully quiet and smooth-running. Durability guaranteed. Practically unbreakable, spot-welded guard. Set it anywhere, or hang it on the wall. Adjust breeze to any angle. 8-foot cord and plug. Blade diameter 6", height 8", weight 3 lbs. 5 oz.

Trade discounts as follows:

Less than 6 fans	\$5.00 each
Six fans and over.....	\$3.75 each

Terms: 2-10-30, f.o.b. New Haven.

Full freight allowed.



Fans packed 6 and 12 to the package. Upon request we furnish free striking, sales-making store display material.

Order early—we have largely increased our production facilities, but despite this the demand will exceed the supply.

So place your order now. If further information is wanted, write us.

The A.C. Gilbert
CO

402 Fox St., New Haven, Conn.

Canadian Representatives:—
Menzies & Co., Ltd., Toronto, Ontario



This Display In Your Window Will Stop Every Pedestrian Who Comes Your Way

The cut-out of the man is life-size and so natural that at first glance it looks exactly as though a real man were in your window demonstrating the comforts of a fan.

The life-like effect of the display is enhanced by the necktie of the man, which is loose and so constructed that it flutters naturally in the breeze of the fan just as a real tie does.

The cut-out is beautifully lithographed in eight colors, and the reproduction above gives a very inadequate impression of its real effectiveness and beauty. It is mounted on a heavy board with an easel back. All you

need to complete the display is a Robbins & Myers Fan, placed as shown, so it will blow on the cut-out and keep the necktie in motion.

This is but one of the many effective sales helps we are prepared to furnish dealers this season. The line also includes booklets, folders, lantern slides and newspaper advertisements—everything you need for a complete campaign.

All of the material is sent free by express, printed in your name, ready for use. If you haven't received a copy, write to-day for our large folder which shows the entire line.

The Robbins & Myers Company
SPRINGFIELD, OHIO

New York Boston Philadelphia Buffalo Cleveland Cincinnati Chicago St. Louis San Francisco

Robbins & Myers Fans

G-E "Standard" Separable Attaching Plugs and Receptacles



GE543
Concealed Receptacle



GE624
Miniature Attaching Plug



GE544
Cleat Receptacle



GE625
Moulded Cap



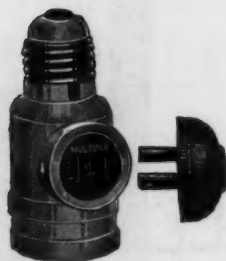
GE662
Metal Covered Cap



GE663
Moulded Polarity Cap



GE658 and 49491 (plate)
Single Outlet
Flush Receptacle



GE696
Combination Socket
and Attaching Plug



GE694 and GE695 (plate)
Double Outlet
Flush Receptacle

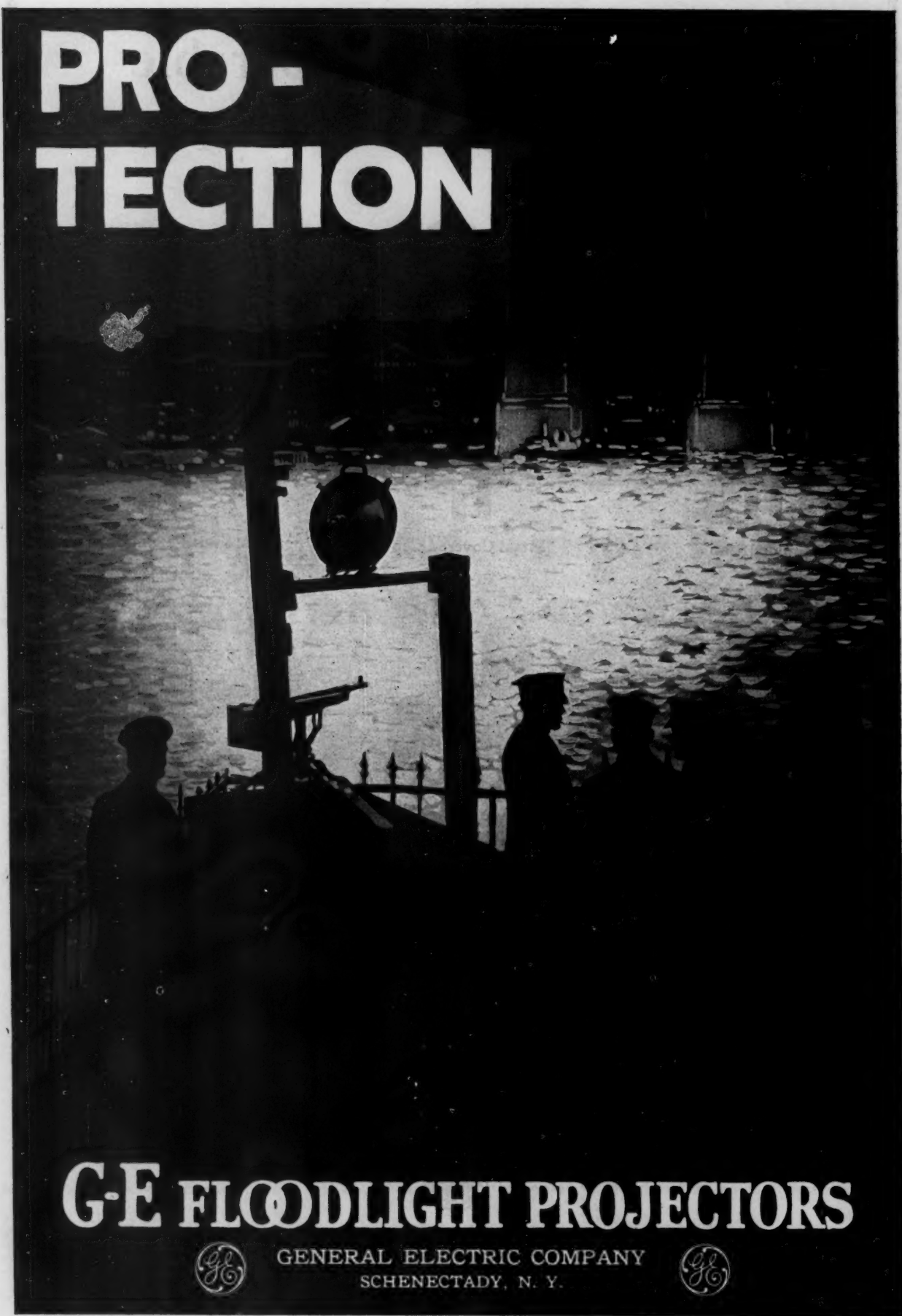
A representative assortment of G-E "Standard" interchangeable devices is shown above. The complete line is sold by distributors in all large cities.

General Electric Company



List of Sales Offices on Second Page Before Editorial Section

PRO- TECTION



G-E FLOODLIGHT PROJECTORS



GENERAL ELECTRIC COMPANY
SCHENECTADY, N. Y.





The New National Guardian FLOODLIGHTING

In the black night a *regiment* of sentries could not protect New York's great East River bridges effectually.

G-E Floodlight Projectors equipped with Edison MAZDA floodlighting lamps are making the protection of these bridges simple and certain.

A few machine gun squads are on duty. Floodlighting gives wide area to their patrol and insures their efficiency of action.

Floodlighting is also affording the most economical and adequate protection for

Government Buildings	Ship Yards
Public Service Properties	Armories
Terminals	Store Houses
Wharves	Construction Work

7079

EDISON MAZDA LAMPS



EDISON LAMP WORKS
OF GENERAL ELECTRIC COMPANY, HARRISON, N. J.



MAZDA

"Not the name of a thing,

but the mark of a service"



The new light that MAZDA Service throws on lamp manufacturers' problems is reflected by the brighter, whiter light that MAZDA lamps give in your home.

The Meaning of MAZDA

MAZDA is the trademark of a world-wide service to certain lamp manufacturers. Its purpose is to collect and select scientific and practical information concerning progress and developments in the art of incandescent lamp manufacturing and to distribute this information to the companies entitled to receive this Service.

MAZDA Service is centered in the Research Laboratories of the General Electric Company at Schenectady, New York. The mark MAZDA can appear only on lamps which meet the standards of MAZDA Service. It is thus an assurance of quality. This trademark is the property of the General Electric Company.



RESEARCH LABORATORIES OF GENERAL ELECTRIC COMPANY



IT'S EASY —

Very easy—in fact—to sell the
Western Electric
WASHER and WRINGER



if you will just write a post card to our nearest office and ask for a copy of the folder "Getting the Prospect Is Half the Sale."

The folder will show you an unusually complete line of Sales Helps for use in your local advertising.

A complete sales campaign—all ready for use—and furnished free of any charge.

Write for it now.

Western Electric Company

INCORPORATED
New York Atlanta Chicago Kansas City San Francisco
Buffalo Richmond Milwaukee St. Louis Oakland
Newark Savannah Indianapolis Dallas Los Angeles
Philadelphia New Orleans Detroit Houston Seattle
Boston Birmingham Cleveland Oklahoma City Portland
Pittsburgh Cincinnati Minneapolis St. Paul Omaha Denver Salt Lake City

EQUIPMENT FOR EVERY ELECTRICAL NEED
Member Society for Electrical Development. "Do it Electrically"





320,000 Reasons why people demand wired homes

Every Thor machine sold is a permanent guarantee that the user will insist upon a wired house.

320,000 Thor Washers, Vacuum Cleaners and Ironing Machines have been sold—every one a potential force when moving day is considered.

This influence, in the long run, probably means more to both dealers and central stations than the profits from the sale and the revenue from the current used.

The Only Complete Line of Electric Washers, Vacuum Cleaners and Ironing Machines.

A Size for Every Family.

A Style for Every Purse.

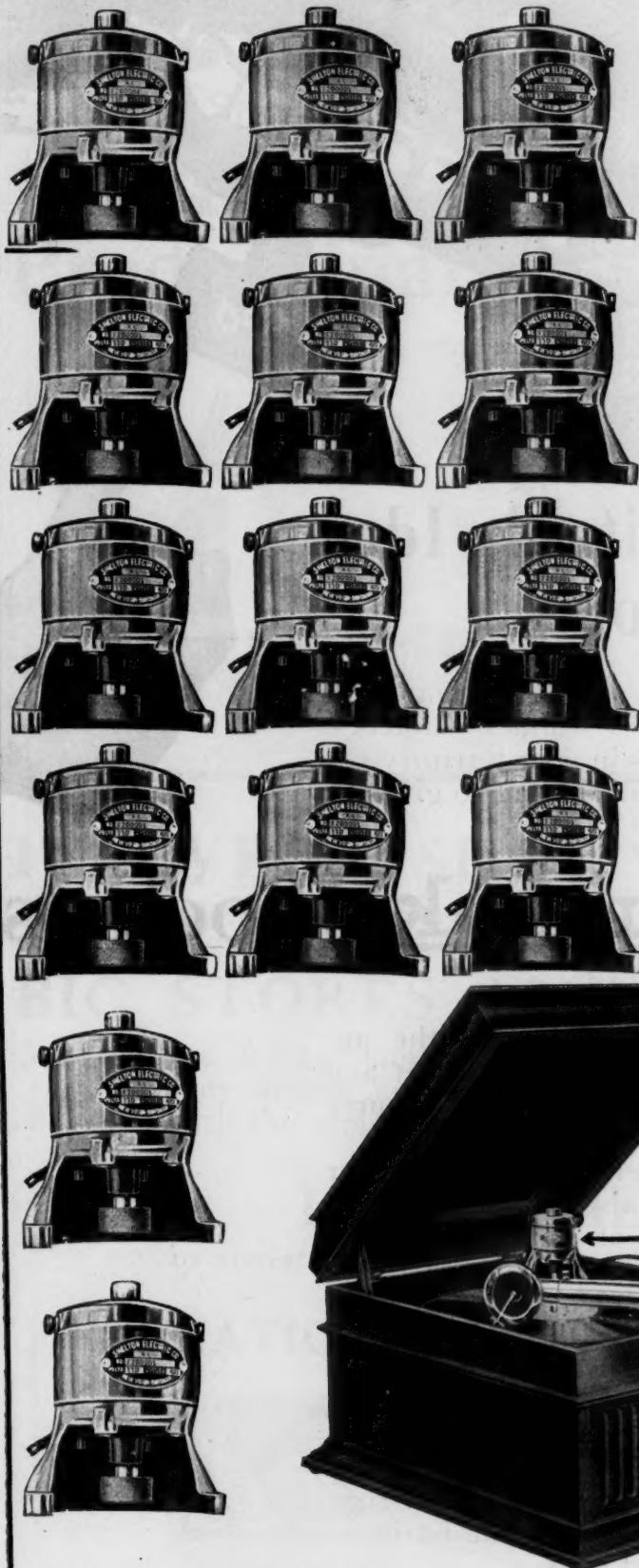
Thor

Hurley Machine Company

32 S. Clinton Street, Chicago

143 W. 42nd Street, New York

The Shelton Phonograph Motor is Protected by Patents



Sell ^{these} 15

Shelton Electric
Phonograph Motors

and the

PHONOGRAPH'S

yours

You'll sell these motors quickly and surely when you

DEMONSTRATE

what they do on this free phonograph. We ship the phonograph with each bona fide order for 15 motors. The music in your store attracts everyone's attention and gets the buyer's order.

The phonograph itself is a handsome mahogany finished instrument—the 50 size. It has full 12" turntable and measures complete 16" x 19" x 12" high. As a suggestion, give it to your salesman selling the largest number of the motors.

The tone quality obtained with the Shelton Electric Drive makes any phonograph a better one.

In fact the Shelton Electric motor is a necessity for every phonograph owner.

See how compact the Shelton motor fits on the machine. The plate is rotated by a simple friction drive. The motor needs no attention whatever.

Write for special dealers' price now for the 15 Shelton Electric motors with the Demonstrating Phonograph.

SHELTON ELECTRIC CO., 30 East 42nd St., New York



Here Is a Profitable Idea For You

If you will make a canvass among the managers of public buildings—factories—mines—hotels—apartment and office buildings in your territory you will find that a lot of them will be glad to give you an order for an installation of

“P & S” Shurlok Sockets

for two reasons.

First, because these sockets prevent the unauthorized removal of lamps from the socket and consequently eliminate what is frequently a source of considerable loss to the building owners.

Second, because by preventing the improper removal of lamp the Shurlok also prevents the unauthorized and improper use of current from the socket by the attachment of flat irons or other current consuming devices, as frequently occurs when anyone can remove the lamp from the socket at will.

You will find a lot of concerns interested in this and you can get from such concerns orders for installations of considerable numbers of “Shurloks” which will mean for you not merely the profits on the sale of the Sockets but also a profit on the wiring and installation of them. You can **create** business with Shurlok Sockets—and that **pays**.

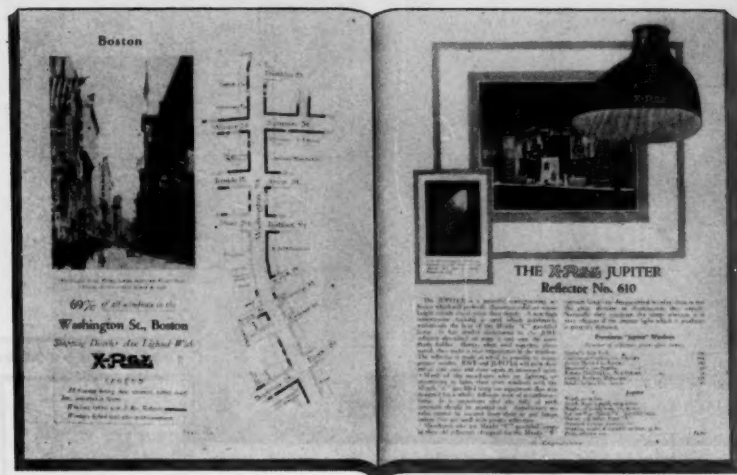
PASS & SEYMOUR, Inc., Solvay, N. Y.

X-Ray.

TRADE MARK

Standard Show Window

Reflectors Predominate



Write for a copy of this interesting book which contains views of the shopping districts of the principal cities of the United States.

(Serial No. 123)

IN EVERY SHOPPING DISTRICT

A large majority of the show windows are X-Ray lighted.

BIG STORES AND LITTLE SHOPS

use X-Ray Standard Show Window Reflectors because they deliver more light just where the light is wanted, with the same consumption of electrical current.

LET US HELP YOU

to interest your local merchants in proper window illumination.

NATIONAL X-RAY REFLECTOR CO.



CHICAGO
237 West Jackson Boulevard

NEW YORK
14 West 46th Street



Electrical Merchandising—

The modern electrical dealer is not content to put his wares on the shelf and wait for a purchaser to ask for them.

Quick sales are his aim, for his profits depend upon the quick "turn-over" of his stock. He is ever alert to devise new ways of getting the goods across the counter.

This new seven-color **BENJAMIN** counter stand shown above puts the goods on the counter—which is nearly across. The pictures show six uses of the Two-Way Plug. The customer sees—and buys.

Get YOURS from your jobber—
while the supply lasts

Benjamin Electric Manufacturing Co.
CHICAGO

New York

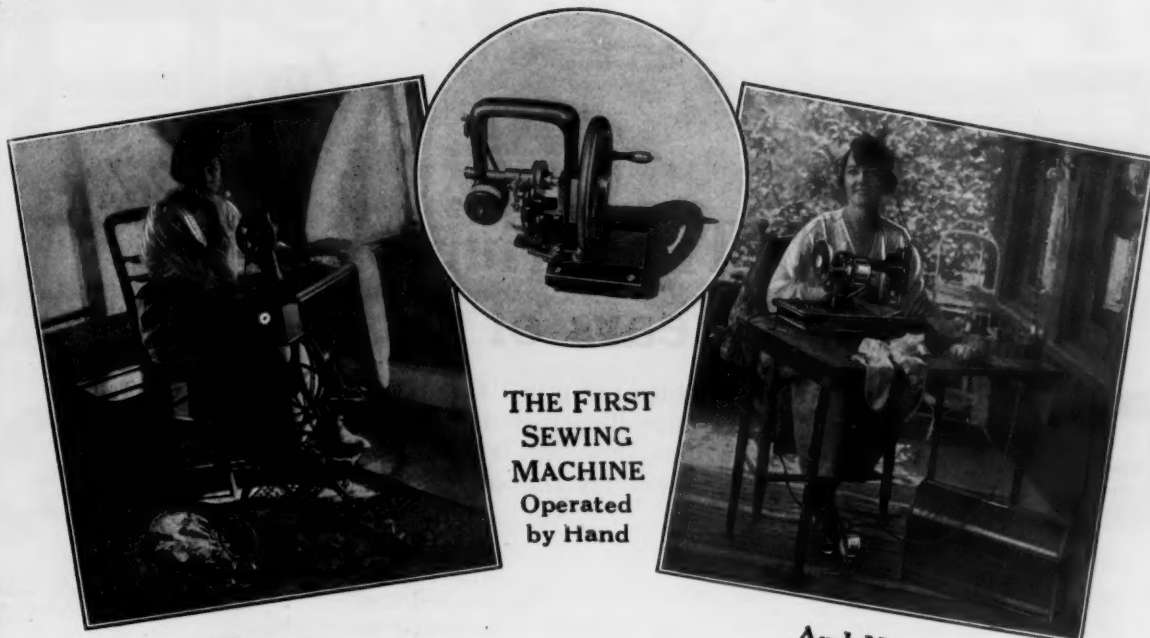
San Francisco

Toronto

London

BENJAMIN
TWO-WAY
PLUG

AN EVIDENCE OF PROGRESS



THE FIRST
SEWING
MACHINE
Operated
by Hand

Then—
The Foot-Power Machine

And Now—
Electricity's Latest

THE *Western Electric* PORTABLE SEWING MACHINE

The electrical dealer who desires the best trade in his town must keep abreast of the times—perhaps a bit ahead—in the goods he has to offer.

It's an evidence of progress to be the dealer in your town to sell the Western Electric Portable Sewing Machine—as it was an evidence of progress for the Western Electric Company to develop it for the trade.

It's a further evidence of progress to use the free sales helps that are offered to the dealer who sees the advantages of tying up to the big spring and summer national advertising drives.

Write for details of our selling plan on this very profitable line.

Western Electric Company

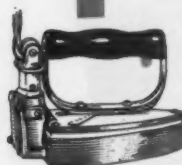
INCORPORATED

New York	Atlanta	Chicago	Kansas City	San Francisco
Buffalo	Richmond	Milwaukee	St. Louis	Oakland
Newark	Savannah	Indianapolis	Dallas	Los Angeles
Philadelphia	New Orleans	St. Paul	Houston	Seattle
Boston	Birmingham	Cleveland	Oklahoma City	Portland
Pittsburgh	Cincinnati	Minneapolis	St. Paul	Omaha
			Denver	Salt Lake City

EQUIPMENT FOR EVERY ELECTRICAL NEED



1909



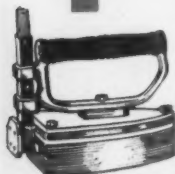
1908



1907



1905



1904



1917 Model

1917 Model

The Triumph of 13 Years of Leadership

The Hotpoint Iron's beginning in 1904 marked an epoch in electric iron manufacture (note illustrations showing its evolution). It revolutionized the then more or less unsatisfactory construction and from its inception dates the successful use of electricity for heating irons.

It was the first iron with

- hot point
- always-cool handle
- attached stand
- removable switch plug.

1917 Model leads as usual—has two exclusive improvements (pat. applied for):

- Hinged Plug Cord Protector
- Thumb Rest.

Hotpoint also leads in publicity; in extensive advertising to educate the housewives of the nation.

Why You Should Sell the *Hotpoint* Iron

It is the best known Electric Iron. The word Hotpoint is the household word for high standard of quality in electrical appliances.

Extensive National Advertising

The public is constantly reminded of "Hotpoint" through periodical advertising. Current advertisements are—

- 2-page, 2-color ad. in April 28 Saturday Evening Post.
- 1-page, 4-color ad. in May Ladies' Home Journal.
- (Both of these featured the Hotpoint Iron.)
- 2-page, 2-color ad. in June 30 Saturday Evening Post.
- (Will feature the Hotpoint Iron.)

Prospects don't have to be talked into buying the Hotpoint.

However, there are plenty of talking points:

- hot point (most heat where most is needed).
- always-cool handle (no pad necessary—comfortable and easy grip).
- attached stand (iron need not be lifted onto attached stand—none necessary. Simply tip iron onto rear stand).
- thumb rest (rests the wrist and makes ironing easier).
- hinged plug cord protector (prevents troublesome cord breakage).

Hotpoint offers effective Cooperation in the way of Window Displays, Special Ad. Campaigns, Folders, Ad. Copy, Electrotypes, etc., to all Hotpoint Distributors.

We solicit your inquiry for further particulars.

Hotpoint Electric Heating Co.

ONTARIO, CAL. CHICAGO NEW YORK LONDON

CANADIAN HOTPOINT ELECTRIC HEATING CO., LIMITED
TORONTO, CAN.

How-I-Did-It

Short Stories of Lamp Sales told *by* Salesmen *to* Salesmen



The burglars who helped Bray get a new lighting customer.



The brick wall, stand-pat merchant that Alexander won over.



A storeowner trying to figure out the Puzzle Picture.



The dentist that Kettle electrified.

DID burglars ever help you get a house wiring contract? April HOW-I-DID-IT tells about a pair in Newark, N. J., who did more than that for J. E. Bray of the Public Service Electric Co., for they caused Mr. Bray to win a \$15 HOW-I-DID-IT award.

R. B. Alexander of Waco, Texas, uses vacant stores to raise window lighting contracts the same as they use vacant lots in some cities to raise potatoes. Read his story in April HOW-I-DID-IT and then get an option on a vacant store in your city.

Stories like these make HOW-I-DID-IT a most valuable clearing house of selling ideas. More than four thousand managers and salesmen read it every month. Is your name on the mailing list?

Every issue contains ideas that you can make use of.

For instance, the Fort Dodge puzzle picture idea that lighted 42 out of 58 windows is one that you could use to-morrow. Many salesmen have already profited by it since it appeared in January.

To read in the March number how T. H. Kettle of Minneapolis electrified his dentist, makes you feel like developing the toothache just to try out his system on your own dentist.

Where else could you get these stories from Texas, New Jersey, Michigan and Massachusetts—written by the live wires in the selling end of the industry? You simply can't afford to miss a single story. Read them all and then decide to write one that will bring you a \$15.00 award. The second award each month is \$10.00 and \$2.00 is paid for every story accepted.

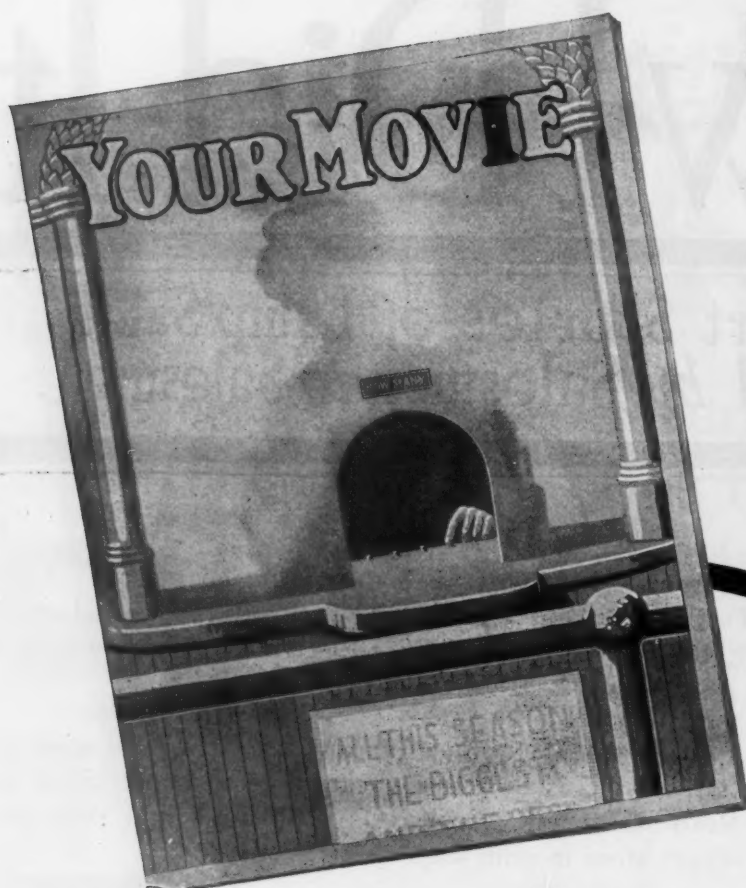


GUARANTEED BY THE NAME

Westinghouse Lamp Co.

165 Broadway, New York

Sales Offices and Warehouses Throughout the Country



Have You Received
Your Copy of—

“YOUR MOVIE”?

This pamphlet is the
“opening gun” in our
national campaign to move
Westinghouse Electric
Fans and Electric Ware
from your Shelves.

Keep your eye on our popular
advertising campaign. In the Saturday Evening Post,
Collier's or Literary Digest you've seen some of
it. It's the biggest thing of its kind ever undertaken
in the electrical field. The co-operation you'll get from
Westinghouse this season will set a new record.

Our dealer service will not only include a varied supply
of advertising material, but also practical merchandis-
ing ideas, which have proved money makers for others,
and a definite sales program for every month in the
season.

Westinghouse Electric & Mfg. Co.
East Pittsburgh, Pa.

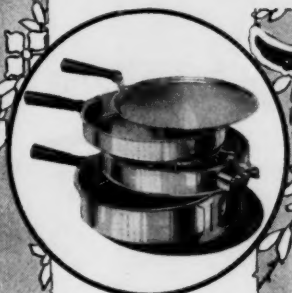
Sales Offices in All Large American
Cities



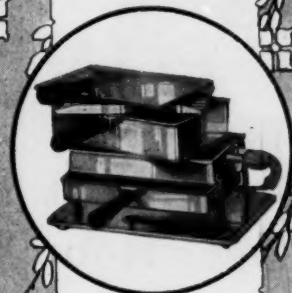
Westinghouse

UNIVERSAL*Electric
Ranges and
Grills*

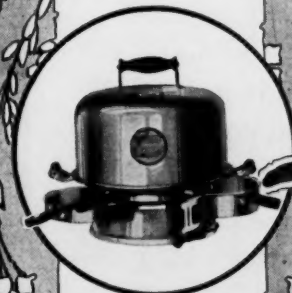
No. E9688\$24.50



No. E984\$6.50



No. E982\$6.00



No. E9841\$12.50

**Increase Summer Business**

The delight which everyone experiences in cooking their meals electrically is at its height during the torrid summer weather.

At this time your customer may best be interested in the coolness and convenience of this modern and practical method of preparing the meals. With an interest in Universal Grills and Ranges for summer purposes once aroused their usefulness becomes recognized and a demand throughout the year will follow.

From Broiling to Baking

Any cooking process possible on a gas stove or coal range may be done in a quantity sufficient for three or four people. Entirely clean and without fumes of the fuel to mar the flavor.

Heat Easily Regulated

The proper degree of heat for each cooking operation may quickly be had by simply changing the connection plugs. Simmering, stewing or baking heat are thus available at a moment's notice.

Economical in Use

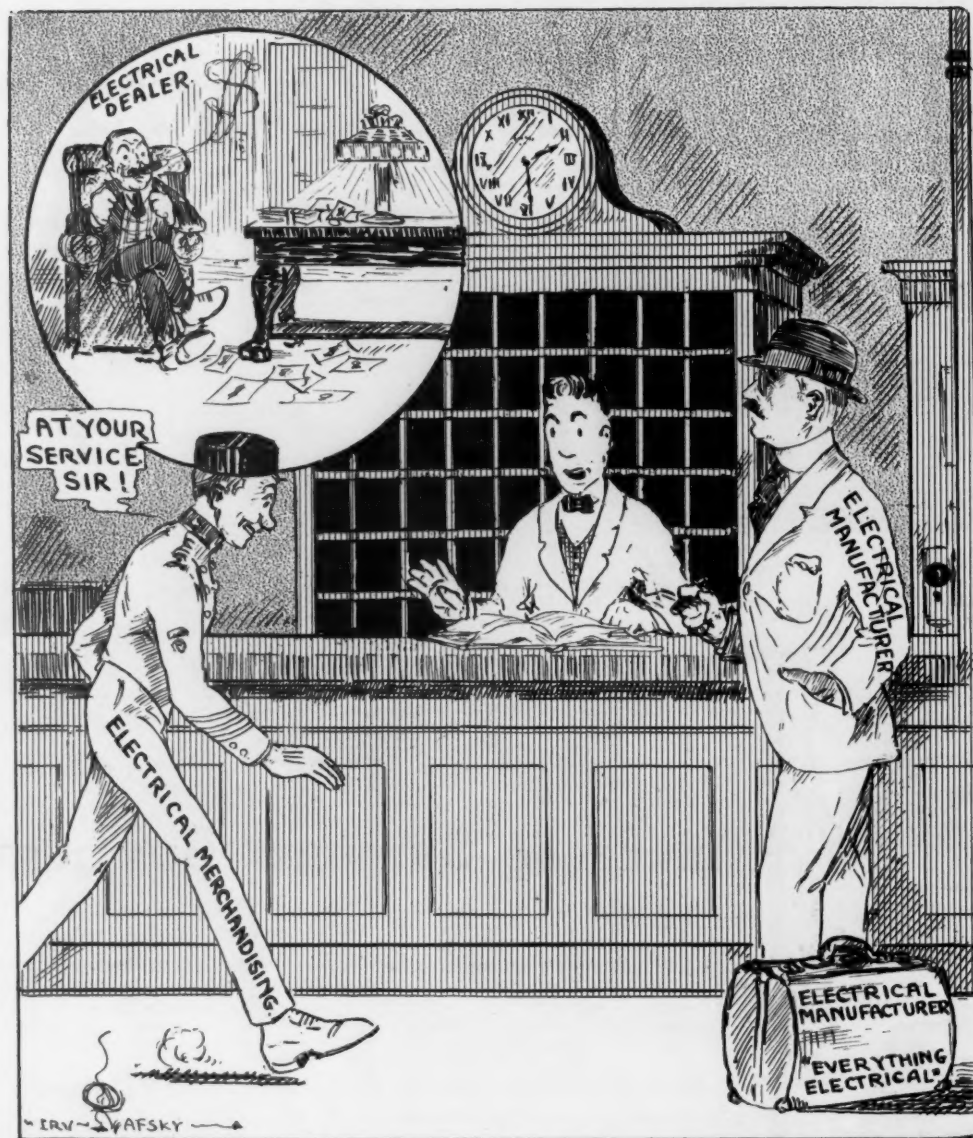
Being only in use as they are actually needed much is saved in the cost of cooking. All of the heat generated is available so that the work is done at the price of only a cent or two.

Carry to Any Room

The lightness and compactness of their construction allow of their being carried from room to room as needed. Small enough to pack out of the way, large enough to do the work.

The extra strength and sales features of Universal Grills and Ranges are your asset. We will be glad to tell you about them if you will write for information.

LANDERS FRARY & CLARK**NEW BRITAIN
CONNECTICUT**



Front! Show Mr. Manufacturer to Mr. Buyer's Room

Business men agree that we should eliminate waste but any alarmist utterance of economy to the foolish extreme is likely to work mischief on general business conditions.

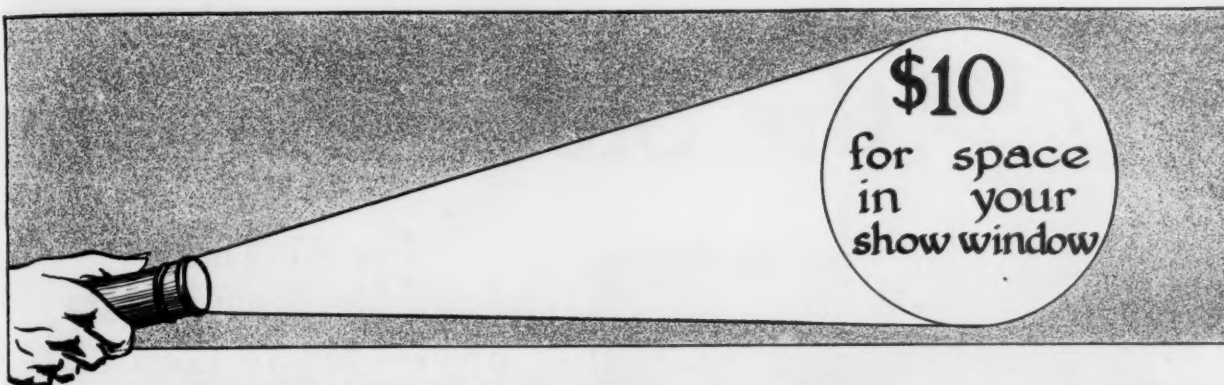
The feeling that any agitation to check normal consumption might create hard times has become general and the one big slogan now is

"Buy now what you need—Business must go on."

Electrical Contractors and Dealers, Jobbers and the Commercial Men of Central Stations are in the market for electrical material of all kinds and many of them are having a difficult time in buying what they need.

You Electrical Manufacturers can reach that big family of buyers, the selling side of the electrical industry, through Electrical Merchandising each month.

Steady, every-month, consistent advertising to these men over the U. S., means a constant flow of orders to you. Electrical Merchandising offers the one big opportunity to reach this great Congress of buyers.



—and sales from which you will further profit

We have a sales plan whereby we can bring prospective customers for Franco Flashlights into your store. This includes an unusual window display. Sent free on request.

We have a flashlight with talking points which will make them buy Francos over any other.

We need your co-operation at the start, and we will pay for it. We will give \$10.00 list worth of our Radio Batteries free to any dealer using our window display service and ordering \$100.00 net worth before July 1st.

Get busy *now* and write for details of the plan—a thoroughly modern co-operative idea.

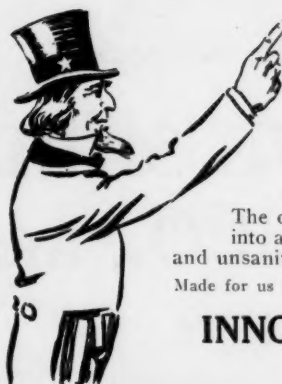
Interstate Electric Novelty Co., 104-114 So. 4th St., Brooklyn, N. Y.
CHICAGO — SAN FRANCISCO — TORONTO

Franco Flashlights

UNCLE SAM
Chooses
the **NEW LIBERTY**
CLEANER for
U. S. Post Office
Service



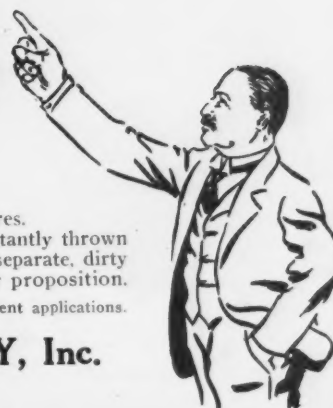
One Lighting Co.
Sells 800
in One Month—
A New
Record



The NEW LIBERTY CLEANER

Handsome, efficient, durable. Many exclusive features.
The only cleaner with an inside nozzle brush which can be instantly thrown into action by a touch of the foot. It eliminates handling of a separate, dirty and unsanitary brush. **Get in line—write NOW** for liberal dealer proposition.
Made for us by the General Electric Co., under the Kenney patents and our patent applications.

INNOVATION ELECTRIC COMPANY, Inc.
585-589 HUDSON STREET, NEW YORK
Awarded gold and silver medals at Panama-Pacific Exposition.

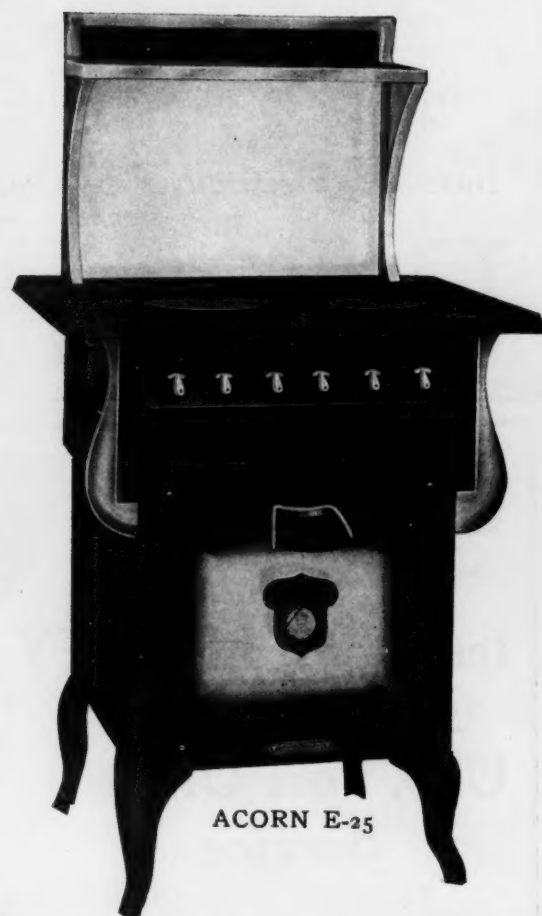


Acorn the Stove Standard



ACORN E-35

For 87 Years
Acorn Stoves and Ranges
have "Made Good".
Every Acorn Product
Has Proved a Success.



ACORN E-25

General Electric Sheathed-Wire Units

All Acorn Electric Ranges
are equipped with the G. E.
Sheathed-Wire Units, which
are without question the
BEST in the World.



New Catalog Sent Upon Request.

**RATHBONE SARD
ELECTRIC CO., Inc.**

ALBANY, N. Y.

Since 1830



==Introducing==
Our New Line of

Acorn ELECTRICS



ACORN E-60

These 4 Numbers
of our new line will
serve to indicate our
ability to meet any
range requirements.



ACORN E-70

**RATHBONE SARD
ELECTRIC CO., Inc.**

ALBANY, N. Y.

A Plan That Has Sold Over \$500,000 Worth of Eurekas in Four Months

Good profits to the dealer in every sale. The Eureka Sales Plan guarantees you against loss and assures a definite profit per sale.

The Eureka Co-operative Selling Plan will interest you because it has been proven successful many times during the past five months.

We can refer you to specific instances where other campaigns have failed and the Eureka Plan has sold machines.

Before you make any plans for Fall business on Vacuum Cleaners, you should get the details of this comprehensive campaign.

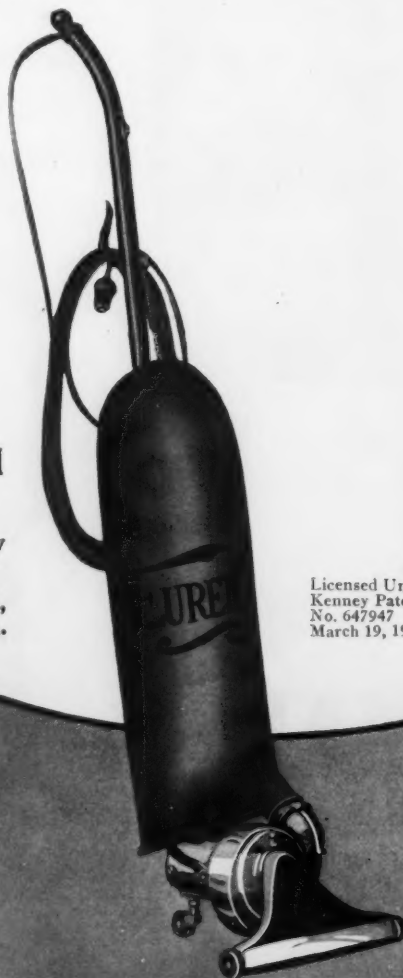
Won the Grand Prize

The Eureka Electric Vacuum Cleaner won the Grand Prize—highest of all awards—at the Panama-Pacific International Exposition, San Francisco, in competition with 18 other makes.

**EUREKA VACUUM
CLEANER CO.**

David Whitney
Bldg.

Detroit,
Mich.



Licensed Under
Kenney Patent
No. 647947
March 19, 1907

At Baltimore, Md

Merchandising methods applied to your Vacuum Cleaner department will make profits and put "load on the line." How's this—six hundred and eight Eureka's sold from March up to this time and a month and a half of good season still to work in. We get the results and the high efficiency of the machine makes each sale bring another.

At Washington, D. C.

"Three hundred and sixteen machines in six weeks and the campaign still on is the result so far at Washington—we are doing all the selling—where can you get a proposition to equal it?"

At Providence, R. I.

"Competition was pretty stiff, but the Eureka Campaign has weathered the gale and sold over three hundred machines in Providence, R. I., so far and the big selling season is still at fever heat—no telling just how many Eureka's will be in use June 30th."

At Cincinnati, Ohio

"Over at Cincinnati the Eureka Campaign ran wild—we could hardly ship enough machines to supply the demand—easy payments boosted the Campaign total up to over 400 machines in a very short period." How do you think a Campaign like this would go in your Appliance Department?

At Minneapolis, Minn.

"One hundred and fifty average for four months, with weather conditions against us, is very good — we think."

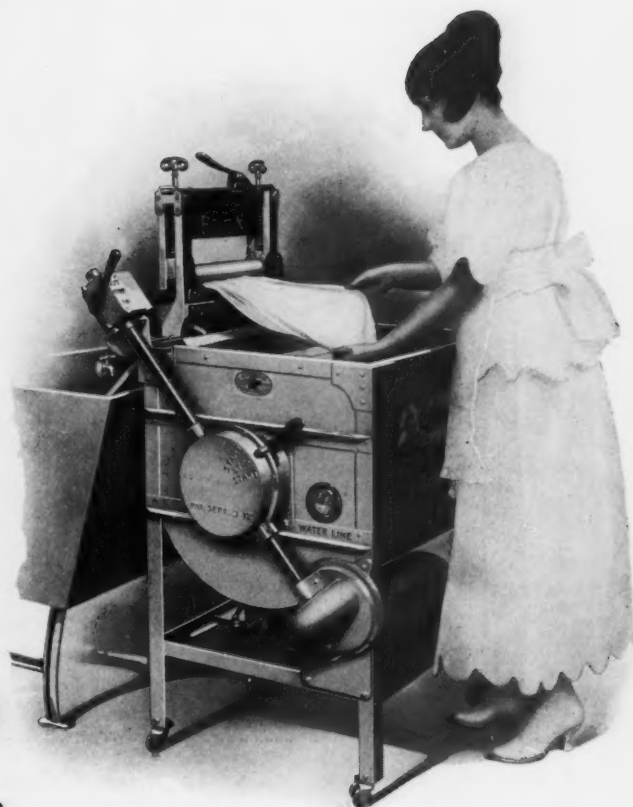
Features— Refinements— Efficiency—

These are important factors in the big successes EDEN dealers are scoring right along with

The Eden

LINE

Electric Washing and Wringing Machine



As you probably know, present-day housewives are pretty well "read up" on washers—and ready to pay a fair price for the right one.

They don't have to do much more than look at the EDEN in order to see that it isn't

any ordinary washer. It is compact—hand-some—thoroughly finished—beautifully enameled. It has a convenient table top and it rolls easily on its extra large double wheel swivel casters. In demonstration, the very simplicity of it never fails to delight the woman customer.

And Here Are Some of the Exclusive Eden Features and Refinements

Automatic arrangement that always brings doors of cylinder uppermost when washer is stopped. Motor guarded against being burnt out through overloading—disconnected automatically by a patented device if washer or wringer is overloaded. All moving parts encased and motor completely hooded. Mechanism never needs oiling—runs in hard grease which doesn't work into the cylinder. Cut steel gears. Window equipped with cross bar to show proper water level. Heavy reinforced cover. Non-corrosive, sanitary, all-zinc cylinder. Special Robbins & Myers Motor.

Every customer's laundry another salesroom for you.

Brokaw-Eden Mfg. Co., Dept. W. Alton, Ill.

*Send for detailed information
about our Plan of Financing Your
Time Payment Business.*

**Fill in and mail this coupon
today!**

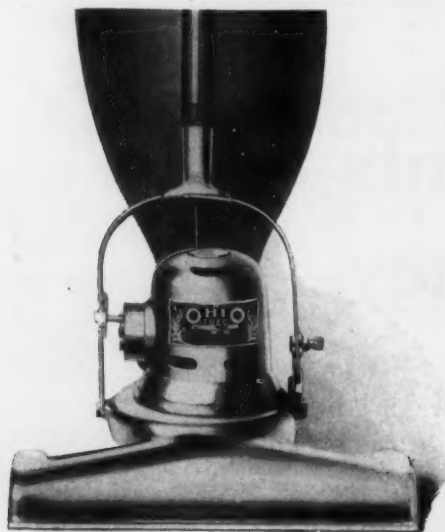
Gentlemen:—

Please explain to me fully how you will finance my EDEN time payment business, and give me particulars concerning the EDEN line of household labor-saving appliances. It is understood that this request in no way obligates

me us

Name

P. O. Address.....



The business end

This is the business end of the new Ohio TUEC electric cleaner. It's standardized in every part like a machine gun and just as efficient. Observe its sensible "active service" appearance.

It's the business end for YOU because the OHIO line sells easily, because you can tell your prospective buyers that the United Electric Company guarantees every OHIO TUEC.

Because the brush is positive driven and produces the maximum sweeping power. Tell them the OHIO TUEC positively likes picking up long cotton threads, hair, etc.

Show them that the OHIO TUEC is easy and light to use and won't tire the operator, that the electric switch is in the machine, not on handle. A child can use the OHIO TUEC without fear of shock.

In fact the OHIO TUEC is the cleaner of unusual merit.

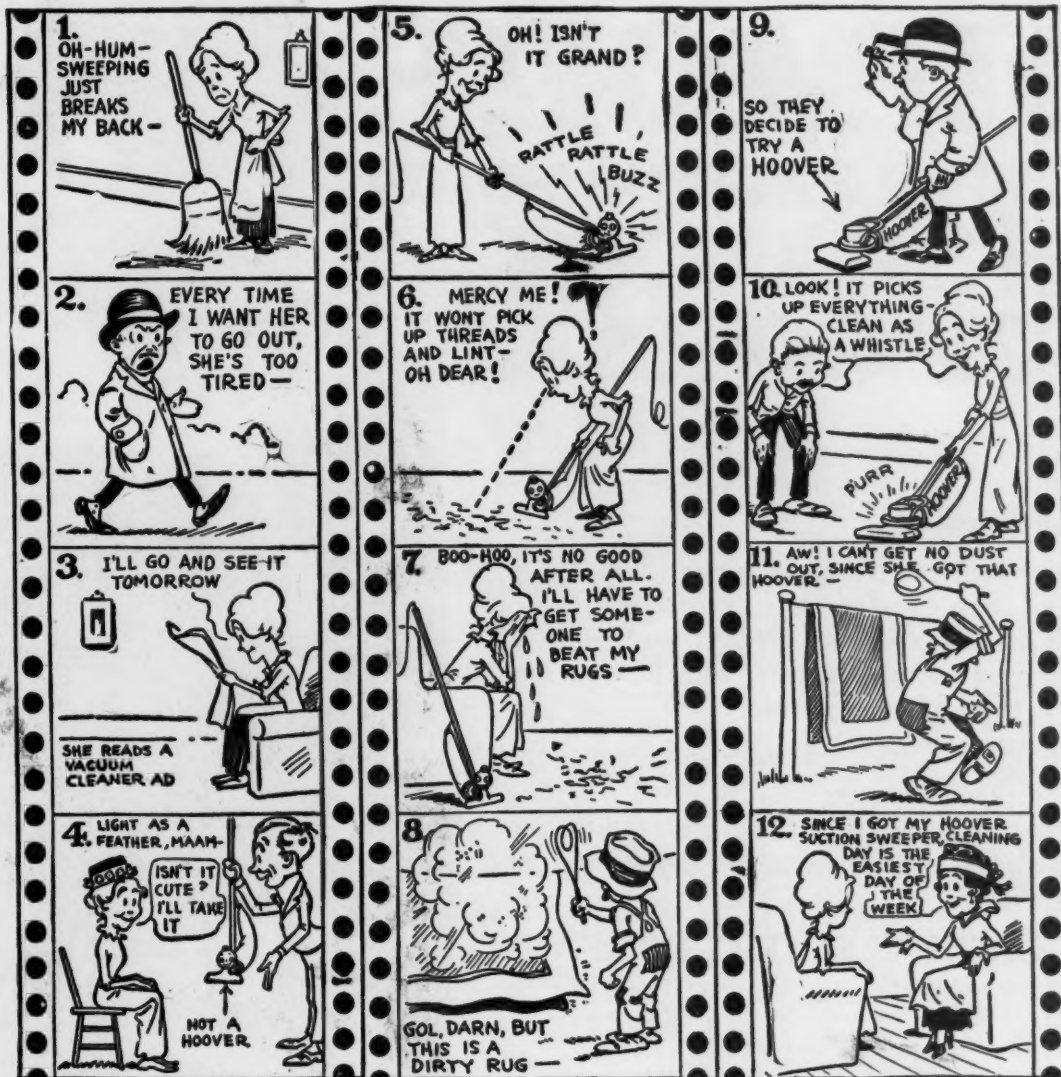
There are thousands of homes where an OHIO TUEC will some day be installed—it's up to you to make that some day soon.

Let us send you a sample OHIO TUEC for your exhibit—send us a postal right now.



The UNITED ELECTRIC CO

151 EIGHTH ST., N. E., CANTON, OHIO



It doesn't pay to sell vacuum cleaners that people afterwards find out are not the best. It makes people lose faith in your word. They complain to their friends about you "stinging them." Your business suffers.

Everyone in the electrical trade freely admits that the Hoover has it over all the others like a tent because of the patented Hoover motor-driven brush.

Why not *sell* Hoovers—and create friends instead of "knockers?" We can show you 150 to 300% yearly profit on every dollar you allot for pushing Hoovers. We will also make it easy for you to get the business. We are doing it in other towns like yours—we can do it for you!

Write for the details of the livest money-making offer that has ever been made



The Hoover Suction Sweeper Company

Box 904 New Berlin, Ohio



This soft hair brush—driven at fast speed by the electric motor—shakes and thoroughly sweeps floor coverings while air suction draws off the dirt thus loosened.

A patented, exclusive Hoover feature!

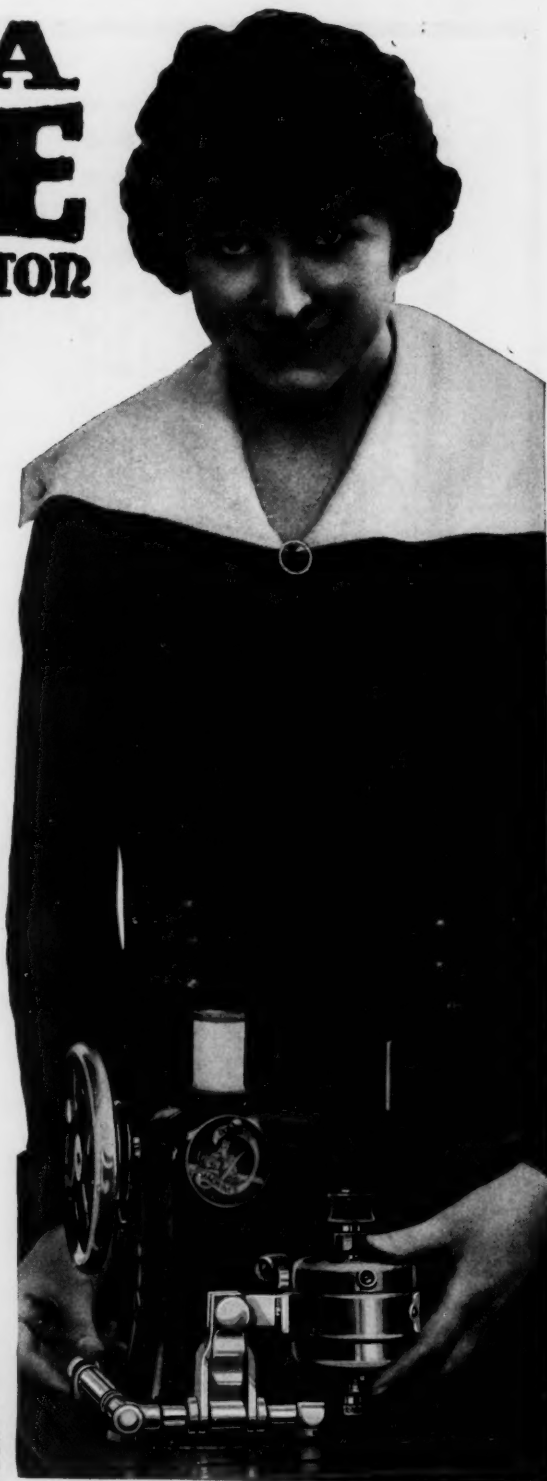
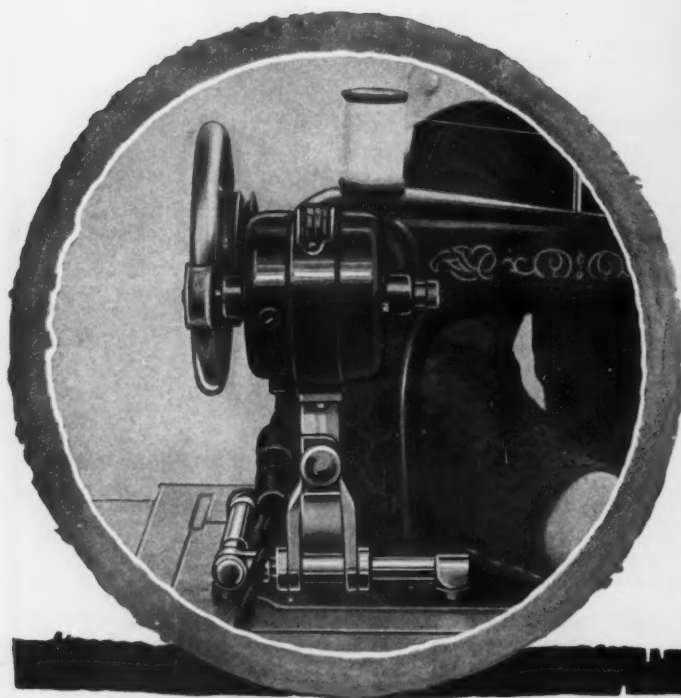
SEND FOR A DUMORE SEWING MACHINE MOTOR On 30 DAYS' APPROVAL

Get a DUMORE—demonstrate its advantages to your customers and you'll sell motors—in quantities.

We are so sure of it that we are offering to send any reliable dealer one of our Model 3 DUMORE Motors on 30 days' approval. If you are not entirely satisfied with it, you may return it to us at our expense.

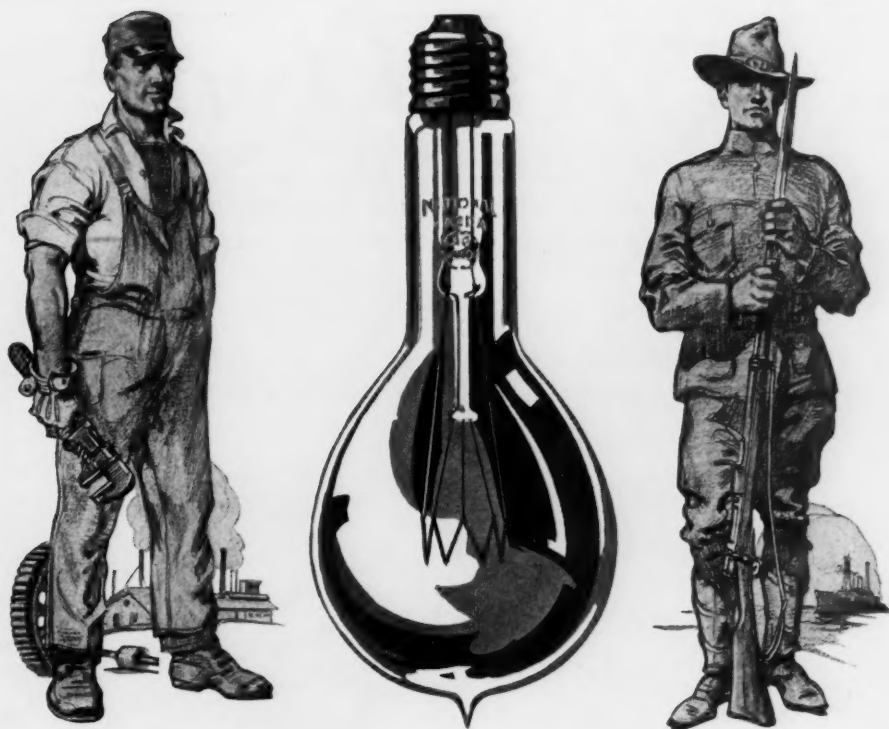
Sell the DUMORE and make a bigger profit on every sale. Specify voltage when ordering. We will gladly furnish you with literature, display cards, movie slides, etc., with your imprint, free of charge.

WISCONSIN ELECTRIC COMPANY
2603 Dumore Building Racine, Wisconsin



ADVANTAGES OF THE DUMORE

Attached quickly and firmly to any machine. No belts to wear out or replace. Lowers with the head into the cabinet. Six speeds—can be instantly reversed. Universal motor, operates on either direct or alternating current.



The Right Hand Helper of Both

The Workman's Most Necessary Tool The Guardsman's Ablest Assistant

Do you realize the situation that this country faces? Do you realize the crying demand for LIGHT—for LIGHT in thousands of fields where light has never played an important role before?

Not today—but TONIGHT thousands of great manufacturing plants must push production at top speed—and they must have BETTER LIGHT to do it by. TONIGHT thousands of plants—thousands of bridges—thousands of wharves—thousands of flags

must be brightly illuminated—for motives of PROTECTION and of PATRIOTISM.

A national demand for better lighting that is without parallel in the lighting business is now sweeping this country—and the answer is NATIONAL MAZDA C lamps.

You are in a position to further the interests of your community—your country. Those who need light but are less familiar with the means of getting it and of using it must of necessity depend on you.

The use of artificial light for protective purposes is treated of in a bulletin just off the press and published by our Engineering Department. A copy is waiting for you if you will send in your request to the Department named above—also, a copy of another bulletin on industrial lighting.

NATIONAL LAMP WORKS

OF GENERAL ELECTRIC CO.
NELA PARK CLEVELAND

Member Society for Electrical Development—"Do It Electrically"



Your opportunity for A BIG DRIVE

Central station, dealers, contractors, any stores selling lighting specialties, can sell this unit in large quantity at a *good* margin of profit per unit.

Every customer can be sold.

It is a seriously designed lamp and produced in big quantities to keep the cost down.

As a leader in sales drives there is no other electrical specialty with an appeal so universal.

The light from a 100-watt Mazda C lamp filtered through a milk-white globe and green shade produces a mild-tempered light that is restful to the eyes.

Write now for a copy of our booklet—"Loading Your Lines."

The Uno-lite Co. of America
— Indianapolis, Ind.

\$5.00

Retail

Specifications

Height	19½ in.
Diameter of green dome.....	10 in.
Diameter of diffuser.....	6 in.
Length of base.....	7½ in.
Mazda C-2 (daylight lamp) recommended.	



The Uno-lite Reading Lamp

a real load builder

UNITED SERVICE

Like the Genie of Aladdin
 RESPONDS TO THE COMMANDING TOUCH—
 SUPPLYING ELECTRICITY
 for Manhattan's Every Need



EMERGENCY
SERVICE

THROW OVER RELAY SWITCH
Interborough Rapid Transit Co.

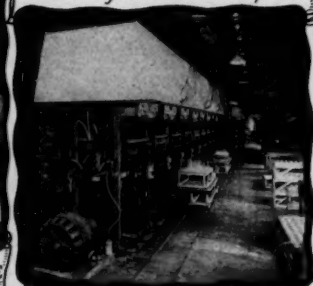


GARAGE
*Exide Battery
 Depots, Inc.*



MOTION PICTURE THEATRE
Rialto

FACTORY
Westinghouse Lamp Co.



LOFT BUILDING
Geo. Backer Construction Co.



APARTMENTS
Astor Court



**THE UNITED ELECTRIC
 LIGHT & POWER CO.**
 General Offices 130 East 15th St.
 New York





Why? Because Bryan-Marsh Mazda C lamps provide a *protecting mantle of light*.

A guard is seriously handicapped—no matter how watchful or how well armed—if the property he must protect is covered in darkness.

For industrial plants, well directed light is as effective as well directed guns. It is far more satisfactory also, for a single blunder on the part of a guard—working in the dark—would mean most serious complications.

Protective lighting is a good insurance investment.

For the Dealer, Central Station and Manufacturer—

Our Illuminating Department will prepare sketches covering every kind of a protective lighting proposition, upon receipt of request.

—And while planning the efficient *protection of the factory*, do not neglect efficient *production in the factory*. Bryan-Marsh Service covers both.

Bryan-Marsh Division

National Lamp Works of General Electric Co.

CHICAGO, ILL.

CENTRAL FALLS, R. I.

Minneapolis

New York

Kansas City

Oakland

Write to our nearest office or jobber

J. Andrae & Sons Co., Milwaukee, Wis.; F. Blasell Co., Toledo, O.; Electrical Sup. Co., New Orleans, La.; Elec'l Spec. Co., Detroit, Mich.; A. B. Ewing, St. Louis, Mo.; Funston Elec. Co., Kansas City, Mo.; Wm. Hall Elec. Co., Dayton, O.; Iowa Elec'l Sup. Co., Des Moines, Ia.; R. M. Laird, Minneapolis, Minn.; Marshall Wells Hdwe. Co., Duluth, Portland and Spokane; Manhattan Elec. Sup. Co., New York City, Chicago, Ill., and St. Louis, Mo.; Mountain Elec. Co., Denver, Colo.; Monarch Elec. & Wire Co., Chicago, Ill.; Northern Elec. Co., Minneapolis and Duluth; North Coast Elec. Co., Seattle, Wash.; Pioneer Elec. Co., St. Paul, Minn.; Stevens Sales Co., Salt Lake City, Utah; Salt Lake Hdwe. Co., Salt Lake City, Utah; H. C. Tafel Elec. Co., Louisville, Ky.; United Lt. Co., Minneapolis, Minn., and St. Paul, Minn.; Van Camp Hdwe. & Iron Co., Indianapolis, Ind.

This offer was laid before the Government April 17, 1917

IN common with others, the business papers of the country—technical, trade and class publications—place service above expediency and patriotism above profit. There are bonds to be sold. Industries are to be mobilized. The Government must speak to the men who plan and do things. The business of the country must be enlisted. Knowing that we can perform this service at this critical hour, and answering the President's call, we, the publishers of the following papers, hereby tender to the Government our advertising pages without expense and our editorial columns.

American Wool & Cotton Reporter	Contractor, The	Laundryman's Guide	Pottery, Glass and Brass Salesman
American Gas Engineering Journal	Domestic Engineering	Lumber Trade Journal	Pacific Marine Review
American Cheesemaker	Daily Iron Trade	Lumber World Review	Progressive Merchant
American Grocer	Drugs, Oils & Paints	Leather Manufacturer	Public Service Magazine
American Ladies Tailor	Dry Goods	Medical Engineering	Practical Engineer
Auto Review	Dry Goods Reporter	Medical Brief	Paint, Oil & Drug Review
American Dentist	Dry Goodsman	Medicine & Hospitals	Penn. Merchant
Automobile Trade Journal	Dry Goods Economist	Metallurgical & Chemical Engineering	Power Boating
American Paint & Oil Dealer	Dry Goods Guide	Motor Age	Pacific Motor Boat
American Paint Journal	Electrical Age	Motor World	Railway Maintenance Engineer
American Shoemaker	Electrical Record	Metal Worker	Rubber Age
Automobile Journal Publishing Company	Electrical World	Mill Supplies	Rock Products
American Architect	Electric Railway Journal	Milliner, The	Railway Review
American Hatter	Electrical Merchandising	Mining & Scientific Press	Railway Signal Engineer
American Furrier	Engineering News-Record	Manufacturers' Record	Railway Electrical Engineer
Architectural Record	Engineering & Mining Journal	Mining Journal	Roadmaker, The
American Contractor	Executive Engineer	Municipal Journal	Refrigeration
Automobile Topics	Express Gazette	Moving Picture World	Revista Americana de Farmacia
American Carpet & Upholstery Journal	Electric Vehicles	Michigan Tradesman	Safety Engineering
American Fertilizer	Electric Traction	Motography	Southern Lumberman
American Motorist	Embalmers' Monthly	Merchants' Index	Steam and Hot Water Fitters' Review
American Construction Publishing Co.	Furniture Journal	Manual Training Magazine	Stone
American Furniture Mfr.	Farm Machinery	Modern Miller	Sporting Goods Dealer
Architecture & Builder	Farm Power	Modern Hospital	Shoe & Leather Reporter
American Perfumer & Essential Oil Review	Foundry	Merchants Trade Journal	Shoe Retailer, The
American Cloak & Suit Review	Furniture Dealer	Manufacturing Jeweler	Shoe & Leather Factory
American Machinist	Furniture Merchants' Trade Journal	Marine Engineering	Southern Carbonator & Bottler
American Machine & Tool Record	Factory Magazine	Motor Boat Publishing Company	Soda Dispenser
American Stationer	Fashion Woman's Tailor	Machinery	Sartorial Art Journal
Architectural Forum	Furniture, Manufacturer & Artisan	Musical America	Southern Lumberman
American Dript Forger (consolidated with Steel & Iron)	Farm Implement News	Musical Courier	Shoe Repair Shop
Am. Elec. & Grain Trade	Flour & Feed	Millinery Trade Review	Southern Merchant
American Miller	Fur Buyer	Musik Trade Review, The	Southeastern Dry Goods Merchant
Automobile	Fur News	Motorist Publishing Co.	Spokesman Publishing Company
American Druggist	Gas Age	Merchants Journal & Commerce	St. Louis Lumberman
Aviation	Gas Energy	Merchants and Manufacturers Journal	Southern Architect & Building News
American Artisan	Gas Record	Marine Review	Shipping Illustrated
Brooms, Brushes & Handles	Grand Rapids Furniture Record	Metal Market Report	Superintendent & Foreman
Bulletin of Pharmacy	Hay Trade Journal	Mill News	Street Railway Bulletin
Boller Maker	Hardware Trade	Merchants and Manufacturers	Southern Engineer
Builders' Guide	Hardware & Housefurnishing Goods	Mill Supplies	Tobacco
Brick & Clay Record	Hardware Dealers' Magazine	Modern Grocer	Telegraphy & Telephony Age
Builder & Contractor	Harness Herald	Motorcycling & Bicycling	Traffic World
Boot & Shoe Recorder	Hardware World	Merchants Journal	Textile World
Blast Furnace & Steel Plant	Harness & Saddlery	Mias. Valley Lumberman	Trade Review
Building Age	Harness Gazette	Merchants Record & Show Window	Tradesman Publishing Co.
Bulletin of Photography	Hardware Age	N. Y. Medical Journal	Talking Machine World
Camera, The	Heating and Ventilation Magazine	National Lithographer	Timberman, The
Contractor	Hide & Leather	National Coopers Journal	Telephony
Cordage Trade Journal	Hotel Gazette	New South Baker	Tea & Coffee Trade Journal
Commercial Vehicle	Hotel Monthly	National Electric Contractors	Toys & Novelties
Cement World	Housefurnishing Journal	National Druggist & Medical Brief	U. S. Paper Maker
Compressed Air Magazine	Iron Age	Nuggets Bulletin	Variety Store Magazine
Coal Age	International Trade	National Hardware Bulletin	Vehicle Monthly
Clifford & Lawton	Implement & Vehicle Record	National News	Western Architect
Cottonseed Oil Magazine	India Rubber Review	National Cleaner & Dyer	Western Confectioner
Concrete Age & Dixie Woodmaker	Interstate Grocery	National Laundry Journal	Wis. Motorist
Concrete Cement Age	International Railway	Northwestern Miller	Wood Turning
Continental Jeweler	Illustrated Milliner	National Engineering	Women's Wear
Commercial Car Journal	Industrial Record	National Petroleum News	W. F. Wendt Publishing Company
Clothier & Furnisher	Implement & Vehicle Journal	Office Appliances	Western Undertaker
Commercial Fertilizer	Implement & Tractor Trade Journal	Ohio Architect, Engineer & Builder	Western Engineering
Clay Worker	Ice & Refrigeration	Office Outfitter	Yachting
Canning Trade	Improvement Bulletin	Oregon Merchants Magazine	
Commercial Bulletin	Jewelers' Circular	Osteopathic Physician	
Cotton	Journal of the Western Society of Engineers	Paper, Inc.	
Cotton Oil News	Keystone Publishing Company.	Photographic Journal of America	
Canner, The	Los Angeles Apparel Gazette	Plumbers' Trade Journal	
	Louisiana Grocer	Power Packages	



BENJAMIN

And the Swivel Plug

"Imagination rules the universe."

¶ No scholar said that, but one of the greatest soldiers who ever lived.

¶ It is imagination that fashions the world's thoughts into the world's useful things.

¶ Civilization itself is due to the creative work of great imaginations—to men who could turn aside from beaten paths and visualize new ways of doing.

¶ Benjamin men of imagination could *see* a cord at rest, while a threaded swivel whirled about it making the attachment.

¶ The Benjamin Swivel Attachment Plug gave the world a new and better way of attaching portable cords to sockets.

¶ But that is only one among the many useful electrical creations of the Benjamin imagination.

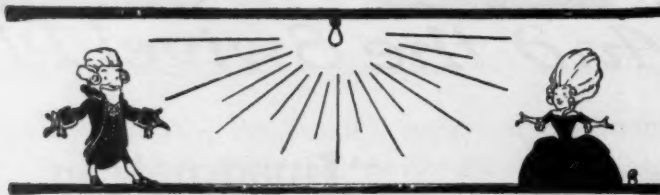
Benjamin Products:

Wireless Clusters	Plug Clusters
Sockets	Wiring Devices
Attachment Plugs	
Stand Lamp Clusters	Reflectors
Street Lighting Units	
Store and Office Fixtures	
Gas and Vapor Proof Fixtures	
Industrial Lighting Units	
Show Case Lighting	
Panel Boards	Factory Signals
Safety Devices for Punch Presses	
Screw Drivers	Tool Sets

BENJAMIN ELECTRIC MFG. CO.
CHICAGO

NEW YORK : SAN FRANCISCO : TORONTO : LONDON

AN INSTITUTION BUILT ON IDEAS



Our Felicitations

to the members of the Electrical Industry attending the Fortieth Convention which has been held during the thirty years of the organization of the

National Electric Light Association

Coming on the thirty-fifth anniversary of the organization of this country's first underground Central Station system, the Convention will give evidence afresh of the untiring efforts of the men and women who have accomplished the great achievements of the electrical industry of the United States

The New York Edison Company

At Your Service

General Offices: Irving Place & 15th St., New York City

THE UNIT OF DAY BRIGHTNESS



It's a little matter to drop a post card in the mail today containing these instructions:

"Send us your new booklet (now on the press) on the

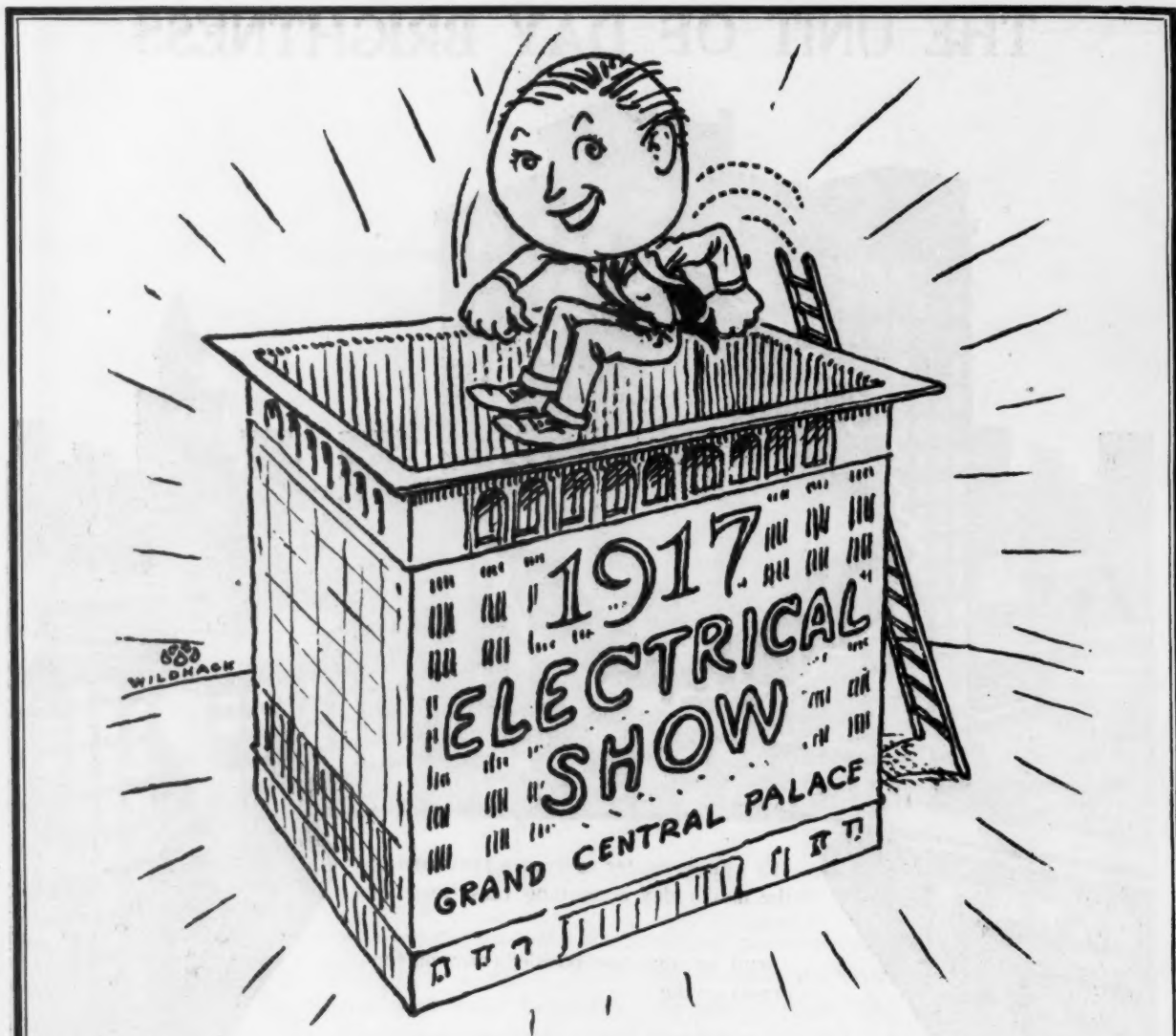
DENZAR

But it is a big, sure tip on business building that you will find in the booklet. It doesn't simply tell you that the Denzar is "different" and "better." It shows you why and it furnishes you with simple, convincing arguments that will break through the reserve of nine merchants out of ten.

What we chiefly urge now is that you make sure to get this booklet. The Denzar itself will do the rest through sheer merit. When you know the Denzar you'll recommend it with the same enthusiastic confidence that has marked the work of many other wide-awake dealers.

Beardslee Chandelier Mfg. Co.

221 S. Jefferson Street
CHICAGO, U. S. A.



Get in while the *getting* is good

In planning your advertising campaign for this year
you'd better make provision for space at

The Electrical Exposition and Motor Show *of* 1917

The best advertised *business-producer* in the Electrical field

October 10th to 20th inclusive

Mr. George F. Parker, General Manager

Offices: 124 West 42nd Street



A \$25,000 position~ can you qualify?

The production-managership of a big corporation is open. The salary is \$25,000 a year.

You want that job. You call on the president and try to "sell" yourself to him and the corporation.

What have you to offer? What are your talking points? Could you, with confidence, answer the advertisement for a \$25,000 executive which appeared last January in a leading weekly magazine?

Do you really believe that you are qualified for so responsible an executive position? Or do you realize that you cannot fill the place because you are one-sided? Your technical training is complete—you are a capable engineer or draughtsman or salesman. But what do you know about the rest of the business?

The knowledge an executive must have

An executive must have a thoro knowledge of business and of the principles that underlie it. Modern corporations have no high places for untrained, or merely one-job men. For the big places, sound judgment and broad knowledge, rather than specialization, are required.

The Modern Business Course and Service of the Alexander Hamilton Institute trains men in business principles. It qualifies men for executive positions by teaching them business fundamentals. It gives you the benefit of the experience of thousands of successful men with all their errors eliminated.

Advisory Council

Business and educational authority of the highest standing is represented in the Advisory Council of the Institute. This Advisory Council includes Frank A. Vanderlip, President of the National City Bank of New York; Judge E. H. Gary, head of the U. S. Steel Corporation; John

Hays Hammond, the eminent engineer; Jeremiah W. Jenks, the statistician and economist, and Joseph French Johnson, Dean of the New York University School of Commerce.

Helps men succeed in a big way

Daily there filter into headquarters in New York many intensely human stories showing what the Modern Business Course and Service has done for its subscribers. Many of these stories tell how men with technical training have risen to big executive positions.

One subscriber who was formerly chief engineer of an interurban railway, is now general manager of a suburban railway system in Syracuse.

Another chief engineer who studied the Alexander Hamilton Institute Course is today general manager of a new electric railway system in Maryland.

A third subscriber was a salesman for one of the largest builders of electrical machinery in the country. Today he has gone with a lighting company at a greatly increased salary.

"Forging Ahead in Business"

A careful reading of the 135-page book, "Forging Ahead in Business," which we will send you free, will repay you many times over. Every man with either a business or a career to guide to bigger, surer success, should read this book. Simply fill out and send the coupon below.

ALEXANDER HAMILTON INSTITUTE

773 Astor Place

New York, N. Y.

Send me "Forging Ahead in Business"—FREE

Name.....

Business Address.....

Business Position.....





The Underwriters'
label on
DURADUCT
(Reg. U. S. Patent Office)

Means:

It is fire resisting and waterproof and affords the right protection for wires.

To know Duraduct is to use it—to use it is to profit.

Learn why! All good jobbers sell it.

TUBULAR WOVEN FABRIC COMPANY
MANUFACTURERS — PAWTUCKET, R. I.
GENERAL SALES AGENT — A. HALL BERRY
71-73 Murray St., New York — 9 So. Clinton St., Chicago

Northern Electric Company Distributors for Canada
LIMITED

THE BLACK DOTTED LINE IS THE MARK OF
DURADUCT



A Simple, Complete System for Retail Stores

The Electrically Operated Cash Register

*Does fifteen necessary things in
three seconds.*

Simple to operate — saves
time.

Forces accuracy — gives quick
service.

The New National Cash Register Credit File

*Cuts out all bookkeeping of cus-
tomers' accounts.*

No blotter — no daybook — no
customers' ledger.

Every customer's account balanced
to the minute.

Stops leaks — satisfies customers — increases profits in stores.

Old cash registers taken in part payment.

Every retail merchant should write us for particulars.

The National Cash Register Company, Dayton, Ohio

Cut out the coupon below and mail it to us today

Dept. 84. National Cash Register Co., Dayton, Ohio

Please send me full particulars on

- ☐ latest model cash register.
☐ new N. C. R. Credit File.

Name _____

Address _____



Service Beneath the Surface

When Jules Verne was writing "Twenty Thousand Leagues Under the Sea," the Habirshaw Company was developing the kind of insulated wire without which Verne's dream—the submarine—could not have become a fact.

Beneath the polished black surface of Habirshaw wire lies service that never fails.

HABIRSHAW

"Proven by the test of time"

Insulated Wire

for more than 30 years has been chosen for difficult work on land and under sea. Many miles of telegraph cable under the water, as well as wire for power plants and residences all over the world, have been in continuous use for years.

Habirshaw reputation, recognized all over the world, is an asset for contractors and dealers. When you use Habirshaw you furnish real wire service that is recognized as such.

Habirshaw wire is manufactured for every purpose where electric current is used—in the home, in the factory, submarine and underground.

Distributed by

Western Electric Company

Offices in all principal cities

Manufactured by

The Habirshaw Electric Cable Co., Inc

10 E. 43d St., New York



Here's a Really Useful Wiring Handbook

Croft's Wiring for Light and Power

JUST ISSUED

By **Terrell Croft**, Author "American Electricians' Handbook" and "Wiring of Finished Buildings."

426 pages, flexible binding, pocket size, \$2.00 net, postpaid.

Both the experienced wireman and the beginner will find this book valuable.

Every man who has ever had, or ever expects to have, anything to do with wiring or installation should own a copy.

To those who know Terrell Croft's "American Electricians' Handbook," or his "Wiring of Finished Buildings," or any of his other technical writings, little need be said about this book.

There was need of such a book. Every wireman has felt it.

There was a demand for a book that would enable experienced and inexperienced wiremen to meet the requirements of the National Electrical Code, and at the same time, by logical arrangement and thorough indexing, tell quickly what the Code requires and *why* wiring should be done in a given way.

The book is a big one. There are over 400 pages, bound in flexible, durable binding, pocket size.

Without hesitation or reservation, we announce that this is a **real Wiring Handbook**.

We Guarantee This Statement

We do not ask you to buy the book or to agree to buy it until you have examined it fully. You are under no obligation to buy it until you are satisfied that it will be of value to you.

You must be satisfied.

Fill out and mail the coupon today.

McGraw-Hill Book Co., Inc.

239 WEST 39TH STREET, NEW YORK

LONDON: HILL PUBLISHING CO., LTD.
6 & 8 BOUVERIE ST., E.C.

Publishers of Books for Electrical Merchandising.

Sent on Approval

No Money
Down



A Wiring Handbook

That fits the requirements of the National Code.

That conforms to the best American practice.

That is indexed so that you can find instantly the facts you need.

That is plainly worded, so that anyone who can read English can understand it.

That is fully illustrated, so that the right way to do a job can be grasped promptly.

That is, besides, a common-sense, practical commentary on the National Electrical Code.

That tells how to install wiring and apparatus for practically all services, under practically all conditions.

That tells how to install these so as to be electrically safe and mechanically correct.

That explains why installations should be made in a given way.

FREE EXAMINATION COUPON

McGraw-Hill Book Co., Inc.,
239 West 39th Street, New York, N. Y.

You may send me on 10 days' approval:

Croft—Wiring for Light and Power, \$2.00 net.

I agree to pay for the book or return it postpaid within 10 days of receipt.

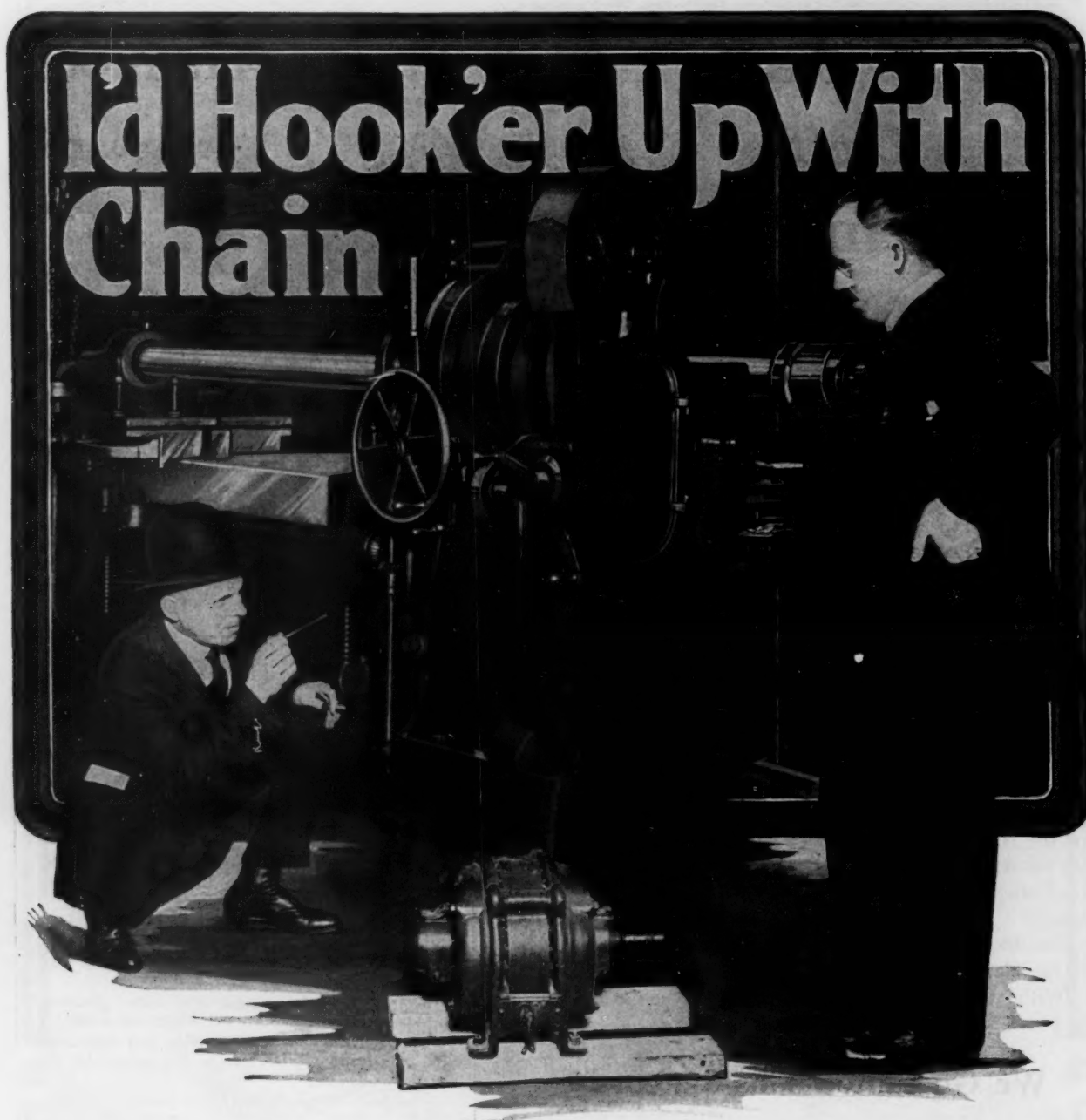
If a regular subscriber to Electrical Merchandising, check here ☐

(Signed)

(Address)

Reference E.M.-May

(Not required of subscribers to Electrical Merchandising. Books sent on approval to retail customers in the U. S. and Canada only.)



WHEN the motor salesman sells you a motor he wants to give you the most for the money expended. He is interested in seeing that all the power of the motor should be *used* for *driving* the shafting or machine for which it was purchased.

If the motor develops its rated efficiency, and you lose 10% to 15% due to slippage of the transmission belt, don't blame the motor. Get a drive that will transmit all the power without slip or loss.

Link-Belt Silent Chain is "Flexible as a Belt—Positive as a Gear—More Efficient than Either." It is the modern method of transmitting power. It is made of steel, durable and reliable.

That's why the motor men recommend it.

Write for Data Book No. 125, the handbook on Silent Chain Drives. It shows how to figure drives and prices.

LINK-BELT COMPANY

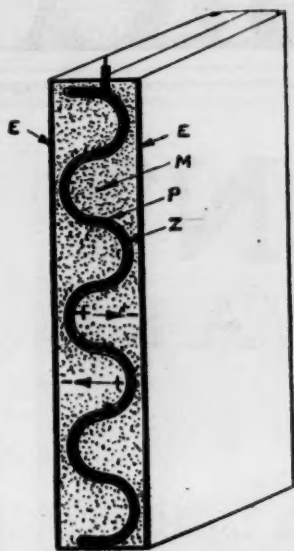
PHILADELPHIA CHICAGO INDIANAPOLIS



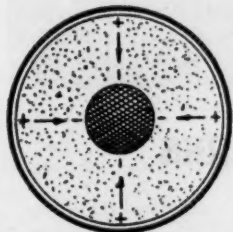
Adv. Form 16



**Grasp this
Opportunity!**



A new form of dry cell battery.



Section of an ordinary round cell.

Copies of the Scientific American article
sent on request

New Guaranteed Waterproof Non-Freezing Battery

The range of service of the old round battery was restricted. Here is a new development that fills the gap between the round dry cell and the storage battery.

Cross-section views indicate how we obtain the highest rate of chemical ingredient consumption known in dry battery manufacture—also a very low internal resistance—providing high output and efficiency.

Only two points of connection between $1\frac{1}{2}$ and 12 volts, and giving more than double the short circuit test and the watt-hours of the ordinary round cell.

Where YOU come in

The big field for sales of this handy, compact, powerful long-life battery is apparent.

We are now appointing jobbing distributors controlling sales in allotted territories.

Our advertising helps and selling plan will stir up profitable new business.

Are you in a position to accept this profit? If so—act! Only one special jobbing distributor for each territory—hence the urgency of asking for our proposition.

From an \$11.00 order last October, one of our distributors did over \$5,000.00 worth of business during the month of April at a profit of over \$1,000.00.

THE HY-WATT BATTERY CO.

1974 East 66th Street, Cleveland, Ohio

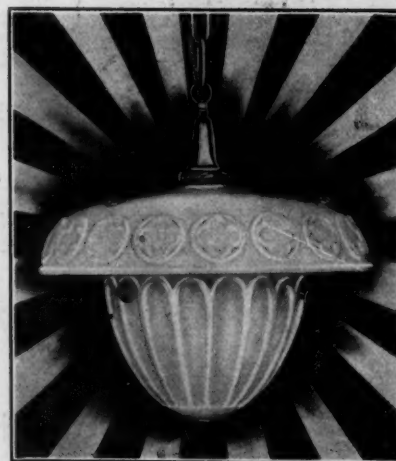
The Good Stores

in all your community want good light—
just as you yourself want it.

CORA "Double Efficiency" UNIT

Reflects a strong light downward; makes a bright ceiling and upper wall, with no dark circles. It is scientifically correct. Handsome matched two-piece fixture; pure white Cora Glass.

This better light brings you bigger business. Let us send you prices now.



No. 1643½ "Double Efficiency"

No. 1639½—11 in. Reflector with 6½ in. Bowl.
No. 1641½—13 in. Reflector with 8 in. Bowl.
No. 1643½—17 in. Reflector with 10 in. Bowl.

Consolidated Lamp & Glass Co., Coraopolis, Pa.

NEW YORK, N. Y.
66 West Broadway.
CHICAGO, ILL.
17 No. Wabash Ave.

PHILADELPHIA, PA.
634 Arch Street.
CINCINNATI, OHIO.
141 East 4th Street.

BOSTON, MASS.
104 Federal Street.
PITTSBURGH, PA.
702 2d Nat. Bk. Bldg.

BUFFALO, N. Y.
525 Main Street.
PORTLAND, ORE.
233 Sherlock Bldg.

HAMILTON, ONT.
62 King Street East.
LOS ANGELES, CAL.
347 Pacific Elec. Bldg.

REGENT GLASS WARE



A NEW UNIT FOR STORE LIGHTING



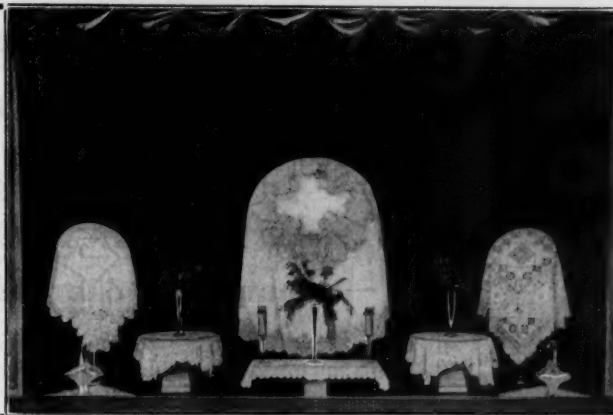
THE tendency in store lighting today is toward large, imposing units. The attractive No. 01414 shown here is designed to meet this demand. It is 14 inches in diameter, and is made of our white Yural glass. The globe is simple in design, gives a well-diffused illumination, and will look well in almost any scheme of interior decoration. It is completely enclosing, and should be used with 300, 400, or 500-watt lamps.

IVANHOE-REGENT WORKS

of General Electric Co.
CLEVELAND, OHIO

For all Canadian business refer to
Canadian General Electric Co., Limited, Toronto, Ont.

FRINK LINOLITE LAMPS



Lord & Taylor Window, New York

FRINK POLARALITE SIGNS

Up-to-the-Minute Ideas in Window Illumination

You are probably unaware of recent developments in this, the most fruitful field for the contractor and central station. The use of shields and louvres and base lights to regulate high lights and shadows in window display should be investigated. Write us for details.

I. P. FRINK, Inc., 24th St. and 10th Ave., NEW YORK

BOSTON, MASS.
55-61 High St.
CHICAGO, ILL.
175 W. Jackson Blvd.

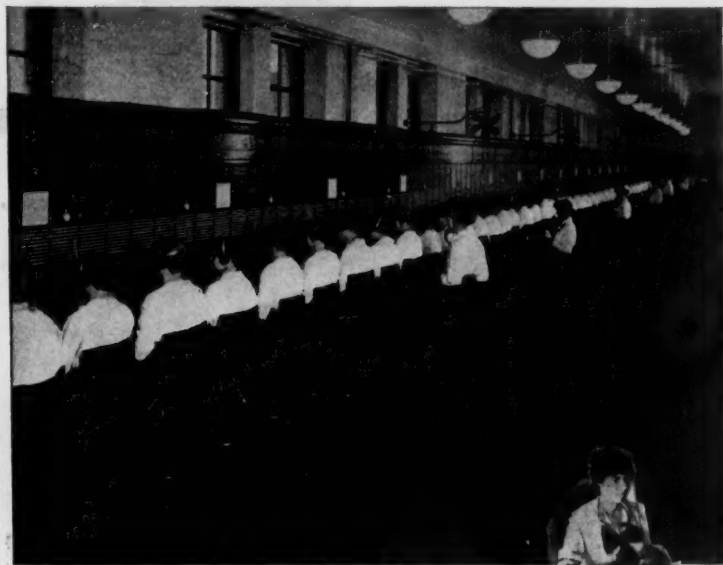
CLEVELAND, OHIO
813 Superior Ave., N. W.
MONTREAL, QUE.
450-452 St. James St.

DETROIT, MICH.
72 Jefferson Ave.
PHILADELPHIA, PA.
210-212 No. Broad St.

PITTSBURGH, PA.
100-102 Wood St.
TORONTO, ONT.
19 Front St., East

ST. LOUIS, MO.
501-505 No. Third St.
SAN FRANCISCO, CAL.
Second and Howard Sts.

SEATTLE, WASH.
1020 First Ave., South
WINNIPEG, MAN.
385 Portage Ave.



OPERATION EFFICIENCY

Operation efficiency is a requirement of the Bell Telephone Company management. Telephone operators must have normal hearing and articulation as well as good vision. Pleasant, efficient lighting is here a necessity.

Equalite Glass, after exhaustive tests, met all the technical and practical requirements for lighting service and is now installed in many of this company's buildings.

Sales Department:
103 Park Avenue
New York City

Bayley & Sons, Inc.
Manufacturers of
Gas and Electric Fixtures

Factory:
117 Vanderveer St.
Brooklyn, N.Y.



Design patent applied for
Complete with shade—\$3.00
Complete without shade—2.25
(does not include incandescent lamps)

Colonial Boudoir Lamp

wired with push socket 6 ft. cord and plug.

Retails at \$5.00

—a lamp you can sell in quantities

Two hundred sold at retail to hotel the first time shown. A department store ordered 100.

Here is the first tastefully designed and well balanced lamp ever offered at anywhere near the price.

Height 14 in. over all. Three finishes: Rich Old Ivory, Statuary Bronze or Bronze and Green.

Shades are of poplin in Old Rose, Copenhagen Blue and Old Gold.

In quantity any color or material desired may be supplied without extra cost if similar cost material is used.

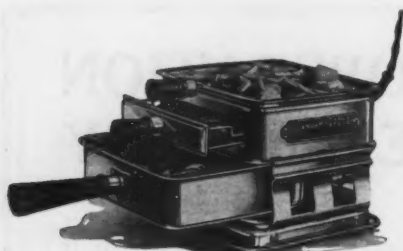
Shade made on substantial wire frame with self-centering spring-wire bulb side grips.

Base and shade elliptical in form.

Now ready for shipment. Get your stock quickly.

Lighting Studios Company

220 West 42nd Street, New York



Beefsteak, Fried Potatoes and Toast

Toasting Does Not
Interfere with Other
Cooking Operations

Three Cooking Opera-
tions Possible at the
Same Time



Sausage (or Chops) and Batter Cakes

STANDARD TABLE STOVE

NEW, UNIQUE, HAS
VALUABLE EXCLUSIVE
FEATURES

BETTER ASK US
ABOUT IT

*The Standard Stamping Co.
Marysville, Ohio, U.S.A.*



Poached Eggs and Toast



Creamed Asparagus and Toast

INTERCHANGEABILITY

Guarding the Factory

Electrical illumination properly arranged is the best protection.

Whether inside or outside Burr Efficiency Units protect customer and dealer alike.

Our experience in this work makes possible a distinctive service to the trade.

Many of the largest industrial plants in America depend upon Burr Efficiency Units after the sun goes down.

Side up with this profit-making opportunity. Mr. Dealer, calling upon us for a full measure of co-operation.

Customary talk of high prices and scarcity notwithstanding, we offer prompt shipment and a fair price.

THE BURR MANUFACTURING CO.
THE A. B. WILSON CO., Gen. Sales Agents
LEADER-NEWS BLDG. CLEVELAND, O.



Burr Unit No. 1312-15
 For Lamps 400 to 1000 Watt

E
C
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SIMPLICITY

"BRIGHTEST LIGHT
 LONGEST LIFE"

NOVO BATTERIES

FOR ALL FLASHLIGHTS

Bullseye on

RECUPERATION

Novo Batteries recover an unusually large percentage of consumed energy; they will help you regain many customers who became dissatisfied with batteries that corrode or lose energy.

Novo Batteries are Guaranteed
 Not to Corrode or Leak.

It will pay you to handle NOVO. Write now
 for our Catalogue and Discount Sheet.

NOVO MANUFACTURING CO.
 424-438 West 33rd Street
 NEW YORK



No. 1343—Length 24 inches, spread 14 inches, finish Flemish old Brass

No. 42—For Hall, etc., length 32 inches, finish Flemish old Brass

No. 94—For chamber or bath, extends 6 inches

No. H-1343—Length 16 inches, spread 14 inches, finish Flemish old Brass

No. H.I.—For Hall, etc., length 32 inches

No. H-23—For porch, finish old Brass, with 6 x 3 1/4 C. R. I. less receptacle

THIS COMPLETE HOUSE SET
No. AA
\$6.70

Keep up the impetus set by "wire your home time."

Look at this complete house lighting set. Here's a chance to make a "big profit" and "big satisfaction" installations.

Send along for complete details of our lighting sets.

SAMUEL FROST
Manufacturer of Lighting Fixtures
302 BOWERY, NEW YORK

These four essentials

1. Reliable
2. Fool-Proof
3. Efficient
4. Long-Wearing

are capitalized in the

Torrington
ELECTRIC VAC

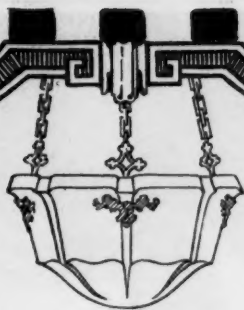
It isn't a cheaply-built cleaner in any detail. Its motor is the best that money can buy—manufactured by General Electric Co.

A full bristle brush—as in a carpet sweeper—rotating in the opposite direction to the motion of the cleaner—sweeps thoroughly.

Using the attachments cleans the house from floor to ceiling.

Splendid little conveniences—clean-cut, practical and free from trappiness—make a quality machine complete.

NATIONAL SWEEPER CO.
190 Laurel Street
TORRINGTON, CONN.



First on Quality —Then on Price

There are two profits for the dealers who display Vanco-Bronze Fixtures—first is the dealer's regular trade profit, and second, the profit which comes from offering goods which are easily sold.

First your customer selects Vanco-Bronze Fixtures because of the exclusive designs, richness of detail and finish, and then you can clinch the sale on the moderate price made possible with the new metal.

Mitchell Vance Fixtures have held a *quality* reputation for 60 years. This experience is embodied in the new designs, which for the protection of our trade are patented to prevent imitation.

The new sales policy allows exceptional service for *one* good dealer for this exclusive line, in each locality—some territory still open. Why not write today for full details?

VANCO-BRONZE THE NEW METAL

THE MITCHELL VANCE CO.,
INC.

Factory, 507 West 24th St.,
New York

DAY AND NIGHT

BAGGE'S ELECTROGRAPH SYSTEMS

The Superior Talking Electric Sign

(Automatic)

(For any language)

There are 3 kinds

- I. The Universal "ELECTRO-FLASH" System. (Unlimited consecutive Flashing on one or more Lamp Banks.)
- II. The Universal "TRAVEL-FLASH" System. CAPACITY, 2,000 letters or less. (The Lamp Letters Traveling Across the Bank.)
- III. The "FIXED" FLASHING System. (Successive Flashing, Repeating Short Text.)

Nos. 1 and 2 for Exploitation of Prominent Locations, for General Publicity, CENTRAL STATIONS, etc.

No. 3 for Individual Use, Business Slogans, etc. (Combination sets of 1 and 3, and 2 and 3, and Electric Clock.)

DEPENDABLE

FOOL-PROOF

MODERN

EFFICIENT

LOWEST in COST

Please state always:
HEIGHT OF LETTER,
VOLTAGE DC or AC,
Cycle or generating
plant of its own.

OUTDOORS

6 feet or less
high

INDOORS

6 inches or more
high

Obtainable in 7, 9,
10-15 Lamps to the
"I" Line

EQUIPMENTS

without LAMP
BANKS and
LAMPS supplied
to THE ELECTRIC
TRADE

BAGGE'S ELECTROGRAPH SYSTEM

14 E. Jackson Boulevard
CHICAGO, ILL.

ELECTROGRAPH

Does That Nitrogen Unit You're Selling

Project the fixture in shadows on the ceiling

or

Catch a lot of dirt

or

Make you think you are face to face with a searchlight every time you look at it

or

Detract from its surroundings

or

One hundred and one other things it shouldn't do?

If it does—discard it.

**Install our 11812
—the unit without a bad habit.**

Glassware Only

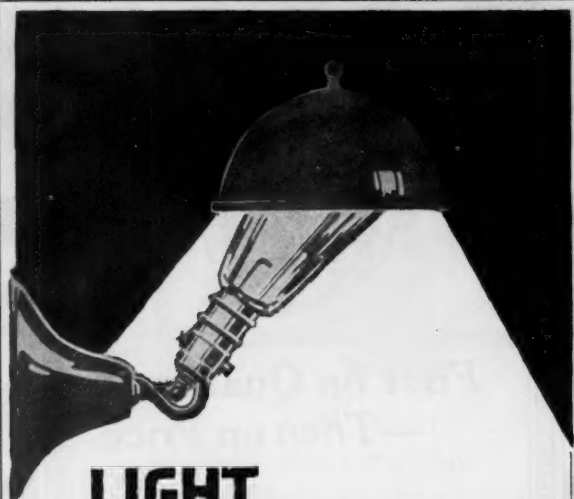


PATENTED

The Phoenix Glass Co.

New York
Pittsburgh

Chicago
Boston



LIGHT Where You Want It— on Profits

Practically all your customers know about the Wallace Lamp—partly by advertising and partly by word of mouth—for a great number have been bought.

It is well known—and justly so. It throws "Light Where You Want It"—adjusts to any angle—hangs or clamps anywhere.

It is the lamp of many uses. It is mighty useful for shaving, dressing, reading—and for traveling, because it folds compactly, no larger than a baseball.

The Wallace Lamp is guaranteed: Satisfaction or Money Back.

Electrical Dealers all over the country have cashed in on the existing demand for the Wallace Lamp—by displaying it.

We will gladly furnish you store cards, window trim, circulars, etc.

Write today for more light on new profits.

**Wallace
Adjustable Lamp**

Retail Price \$3.00

The Two-Arm Extension Bracket is what housewives have long felt a need for—and it fills that need perfectly. It permits the use of current for light and power—or for two lights—at the same time. Screws into any socket. Retail price, \$2.00.



A. C. PENN

Agent for

THE WATERBURY-WALLACE CO., Inc.
100 Lafayette St., New York



Electrified American Flag Displays

All Sizes—
Prompt Deliveries

Quotations and Designs
furnished on request

Century
Manufacturing Company, Inc.
Elizabethtown, Pa.

Designers and
Manufacturers of

Electric Displays
of Every
Description



Sell the Detectifone

Without Carrying a Stock

There are hundreds of merchants and business men who will buy the Detectifone if they are simply told where it can be obtained. They do not, as a rule, want to go into the store and talk too much about it, or otherwise parade their needs in order to find out where they can purchase this much-talked-of device.

It's up to you, as a dealer in Electrical Devices, to *show* them you can fill their orders, and if you will make a proper display it will be unnecessary for you to carry a stock.

**Our Attractive Window Card
Does It**

It will crowd the sidewalk in front of your store.

It is an attention-compelling ad, containing a large illustration similar to the one shown above, as well as all other information a prospective customer wants to know. During present war times the Detectifone is proving especially attractive.

If you want to know how to fill these waiting orders at *full profit*, write us on your letter head or send us your business card with your inquiry. Write today.

Carl Anderson Electric Corp.
145 West Thirty-Sixth St.
New York City



The "Tel-Tap"
for Tapping Tele-
phone Lines insures
courteous and at-
tentive employees.
Intercommunicat-
ing and Sound-
transmitting De-
vices.

Consulting and
Sole Manufacturers
of Secret Service
Devices to Five
Governments.

Telephone, Greeley
1248.



Pittsburgh F. B.

A splendid cleaner at a reasonable price—a cleaner that suits the housekeeper exactly—that has every feature she looks for. It will make your vacuum cleaner campaign a big success.

Write to us and we'll tell you what it is doing for others in campaign work.

Pittsburgh Fans

Did you order a stock of Pittsburgh Fans—"Eights," "Sixes" and "Little Giants"?

These three fans—8 inch, 6 inch and 4 inch—give you a splendid line. You'll be surprised how many people will prefer them to larger fans; also how many will be glad to pay extra to have them in full nickel finish. Place your order now and be prepared when the warm days come.

Pittsburgh Electric Specialties Co.
Pittsburgh, Pa.

Pacific Coast Distributors: United Trading Co.
San Francisco

MONEY IN THE BOX—



It would surprise you if you knew how many men and women there are in your town who do not realize the convenience of buying lamps by the carton—nor the advantages of using

FRANKLIN Mazda Lamps

They go on bringing home one lamp at a time—the same size always. That means poor light for them—and a poor customer for you. We want to help you make it clear to them now. Franklin Mazda Lamps will bring them comfort and convenience and save money both on cost-of-light and cost-of-lamps.

Franklin Advertising puts this idea over for you—starts the householder to buying by the carton. You take the profits.

Write to us about it.

The Franklin Electric Mfg. Co.
Hartford, Conn.

Remember—
The Name of Franklin
Helps You Sell.....



MASTER Garage Pump

For Inflating Automobile Tires
Provides "Air on Tap"
at a moment's notice

That's what private garage owners want—that's what is necessary in big public garages.

Tires must be kept properly inflated—up to the prescribed pressure. Car owners won't wait. The air must be "on Tap."

The Master Garage Pump will properly inflate tires to the specific pressure very rapidly.



Model W
Portable

There is a Master Model designed for every garage requirement.

Master Garage Pumps

Use them ten days. They are guaranteed thus—

"We guarantee Master Garage Pumps for one year against defects of material or workmanship. With ordinary care and usage they should last ten years."

Note these models and send for details of the complete line.

Either Portable or Stationary

Simple, compact, powerful, substantial. Designed to stand severe service in Medium to Large Sized Public Garages.

Consists of a sturdy, efficient, two cylinder pump (bore 1 3/4", stroke 2") driven by a 1/2 H.P. General Electric motor, mounted on a neat metal truck. Running at normal speed (500 R.P.M.) this machine will deliver three cubic feet of free air per minute or will completely inflate a 37" x 5" tire from flat to 90 lbs. pressure in less than 1 1/2 minutes.

The cut shows outfit mounted on a truck with wheels and handle, but if preferred it can be mounted on a stationary base at the same price, and where desired makes a very satisfactory outfit to use in connection with a stationary tank installation.

Net price, complete, either portable or stationary type.

With regular alternating current motor.....\$125.00

With regular direct current motor..... 120.00

F.O.B. Hartford.

Model P—portable or stationary— For private and small public garages

Equipment is as shown by cut and includes 20 feet of air hose with pressure gauge and 20 feet of lamp cord with plug.

1/2 H.P. General Electric Motors used.

There is no installation expense.

It is only necessary to connect the motor with any ordinary electric light circuit by means of the lamp cord and plug which are furnished. No tank is required and the pump delivers pure air in a steady stream directly to the tires.

Completely inflates a 37 x 5 tire from flat to 90 lbs. in 2 1/2 minutes.

Net Price Complete

With regular alternating current motor.....\$70.00

With regular direct current motor..... 65.00



Master Model P
—Stationary

Model P—on truck portable—

For use in public garages and large private garages this outfit may be mounted on a neat metal truck with wheels and handle.

Net Prices:

With regular alternating current motor.....\$75.00

With regular direct current motor..... 70.00

F.O.B. HARTFORD

The proposition covering the sale of these pumps is alluring.

Model P—On truck, same specifications and power as Model P stationary.

Regular A. C. Motor—\$75 F.O.B.

Regular D. C. Motor—\$70 Hartford.

We will gladly supply you with literature. Complete details and our special proposition to agents if you will write at once. Sell these pumps on a 10-day trial. That never fails to clinch the sale. They always prove their ability and necessity.

Master Garage Pumps Made and Guaranteed by

Hartford Machine Screw Co.

538 Capitol Avenue

Hartford, Conn.



A Few New Numbers from our New Catalog No. 20

NOW READY

EVERY dealer and contractor can get a copy of this valuable catalog by writing to us for one on his business letterhead. Write to-day.

THIS book contains 400 illustrations of our best-selling Electric Lighting Fixtures (wide range of price). We consider this the best catalog the trade has even seen. Get your hands on a copy and see for yourself.

WRITE NOW
**SHAPIRO &
ARONSON**
20 Warren St.
NEW YORK



1917 FANS OF MERIT

A-B Gyrofans and Oscillating Fans

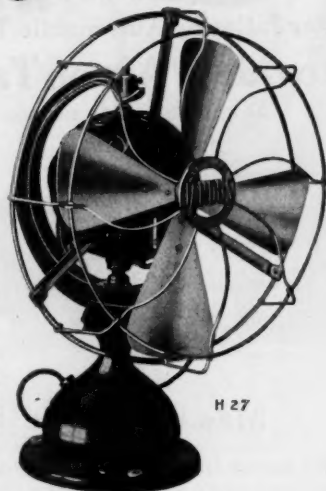


The A-B Gyrofan

is the original and successful — improved through years of service.

There are many places indeed where the A-B Gyrofan will give better all-around results than any other form of ventilation.

And the A-B Jandus oscillating fan has proved its worth in ruggedness and continued service.



*If you do not have A-B Bulletins, write. Order your fans now.
Have you ordered enough Abolites for industrial and protective lighting?*

The Adams-Bagnall Electric Co., Cleveland, Ohio

Manufacturers of
Electrical Apparatus with both
Merchandising and Engineering Merit

Industrial, Commercial and Street Lighting Equipment;
Lighting, Power and Constant-Current Transformers;
Gyrofans; Oscillating Fans; Auto Electrical Accessories

Write now for data or quotation on your requirements!

One of Our
Latest
Designs
in
Cast Metal

No. 5131—
Cast Metal
Bronze Gold
Finish, 14 in.
diam, 2 semi-
indirect and
4 direct lights.
Length 36 in.,
spread 18 in.



Send for
Illustrations of
the Full Line.

E. P. Gleason
Mfg. Co.
37-39 Murray St.
New York City

BRASCOLITE

DIFFUSION PLUS REFLECTION



Contracts
—
We Help
You Land
Them

Contracts for Brascolite equipment are of daily occurrence. They are easy to land because the way to the final sale is paved by our extensive advertising.

Order your stock today.

Luminous Unit Co.

St. Louis, Mo.

New York
30 Church St.

San Francisco
639 Market St.

Chicago
19-S. 5th Ave.

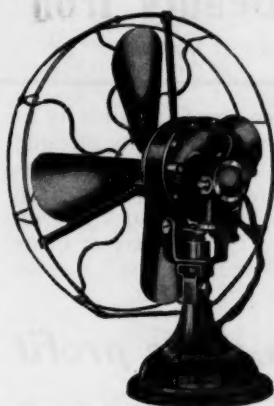
Boston
223 Old South Bldg.

Philadelphia
1020 Land Title Bldg.

The standard

Century

Oscillating Fans



Illustrating a 16 inch oscillator

make 4 complete oscillations per minute. More frequent oscillation prevents putting in motion a body of air which would be effective at distant points.

Should they oscillate into contact with a stationary object, an automatic ratchet device prevents damage to the fan.

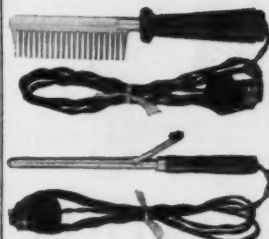
Prices and Bulletins on request.

Century Electric Company

19th. Pine to Olive Streets
St. Louis, U. S. A.

Sales Offices in Principal Cities

219



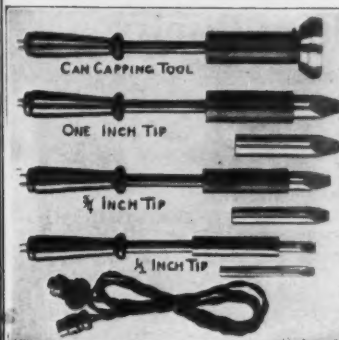
LOWEST PRICES

Dealer Prices

One-Heat Pad... \$2.34
Three-Heat Pad... 4.33
Toaster Stove... 1.66
No. 6 Perc., 6 cup 3.66
Die Cast Comb... 1.66
Curling Iron... 1.66
Immersion Heater 2.00
1000 Watt Radiator 4.66
6" Disc Stove... 3.00
Vertical Toaster. 2.17
Jr. Soldering Iron 2.80
1/2" Soldering Iron 4.20
3/4" Soldering Iron 4.90
1" Soldering Iron. 5.60

HOLD-HEET Appliances will make you money. Write for selling plan, descriptions and name of nearest jobber.

**RUSSELL
ELECTRIC CO.**
140 W. Austin Ave.
CHICAGO

Aid in the
Recruiting
Campaign

Show Your Patriotism

Complete line of
Patriotic Flowers,
Fancy Papers and
Novelties for

WINDOW DECORATING

Eagles, Shields,
Roping, Seals, Etc.

Send for Catalogues.
Dept. K.

Doty & Scrimgeour Sales Co., Inc.
74 Duane Street New York

TESTS

ELECTRICAL TESTING LABORATORIES
80th Street and East End Avenue New York, N. Y.

Mechanical Displays

Without

Mechanism



The

ROTO-LUMINOUS Advertising Display

Both illumination and motion without clock work or motors. Adaptable to any product. Easily set up—requires no attention. Trifling cost—but a little more than an ORDINARY cut-out. It is THE Display of Displays. Write now for details.

Manufacturing Licensees:

EDWARDS & DEUTSCH LITHO. CO., CHICAGO
GALLOWAY LITHO. CO., SAN FRANCISCO, CAL.
NIAGARA LITHO. CO., NEW YORK CITY
STONE LIMITED, TORONTO, CANADA

GEO. MADISON CO., 220 Broadway, New York City
Patentees and Owners

**Strong
Profit
Points**

of the



"American Beauty Iron"

THE BEST IRON MADE

Its easy selling qualities—made possible by its superior mechanical construction, its pleasing and attractive appearance and the fact of its being universally known as the "Best Iron Made"—tend to make for quick stock turning and quick stock turning is the source of quick profits. Certainly this interests you? Let us tell you about them and put you on

The road to more profit

We make a varied line of electric household and industrial devices. May we send you an illustrated price list and discounts?

American Electrical Heater Company
Detroit, U. S. A.

Oldest and Largest Makers in the World

VIDOR—^{New York City} NY.

For

Fuses, Flashlights,
Cases, Batteries,
Bulbs, Lenses,
Plugs; Carbon,
Nitrogen and Tung-
sten Lamps. Auto-
mobile Accessories,
Bethlehem Five
Point Spark Plugs,
Electro Radiators,
Etc.

Vidor service is
profitable for Job-
bers and Dealers
in any part of the
United States.

He buys and
sells electrical
and auto supplies
—in large quanti-
ties.

Vidor quotation
on your require-
ments for any-
thing electrical will
prove its value in
your business.

Write for quotations

Sole distributor for A. F. Daum
refillable cartridge fuses

WILLIAM H. VIDOR
295 Fifth Ave., New York

SERVICE VALUE

Scrap value for material on your shelves or in your yard is not enough. If it can be used by others they will pay *service value* for it.

The Searchlight Section will find these customers for you.

If you have accepted old equipment in part payment of new products you can dispose of this promptly by advertising in the Searchlight Section.

Machinery used in manufacturing and displaced by more modern tools can be sold at a fair price by advertising it in the Searchlight Section.

Wide-awake dealers, agents or representatives can be secured through little Searchlight "Want" ads.

Manufacturing sites, partners, help, capital—anything that anybody is likely to have for sale or exchange for something else—can be located or disposed of through the Searchlight Section.

The cost of putting your Wants in this projector is very slight, whether for a man, for a job or for a market.

SEARCHLIGHT SECTION



Puts Dollars in the Till!

The difference between what you pay for frosted lamps now—and the cost if etched with this material, would leave you a mighty nice profit at the end of the year—a good many more dollars in the till.



has been tested, tried and adopted by manufacturers, jobbers and dealers the world over. It etches the glass—removes the silica—and still it's absolutely safe.

Try Etch-O-Lite, today—Order a 2½ lb. or 10 lb. container

UNION ELECTRIC COMPANY

Sole selling agents for United States
Terminal Warehouses Pittsburgh, Pa.
Canadian Sales Agents—Northern Electric Company, Ltd.



Protect Your Investment

The man who has a bad fire congratulates himself if his risk was insured. You can protect your generators and motors against damage from dangerous overload if you use the proper fuses. The cost will be slight in proportion to the value of your equipment.



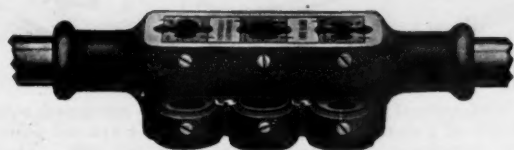
"UNION" Enclosed Fuses have stood the test of time and can be depended upon to open the circuit at a pre-determined overload. Why not use them?

A large saving can be effected by returning blown Knife-Blade Fuses for reloading at the factory.

Complete information in Fuse Catalog No. 28. Ask your Jobber or write us for a copy.



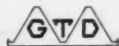
For Conduit Threading



The TRIO Die Stock

Save your time and patience by having all your dies in *one* stock. No loose dies or parts to hunt up and assemble.

The TRIO contains three cutting sizes of Little Giant pipe dies all adjusted ready to use.



Greenfield Tap and Die Corporation

Greenfield, Mass.

New York Chicago
Galt, Ont., Canada



Send for No. 37 Catalog
of Screw Cutting Tools



Royal dealers this spring are making more money than ever before—The Royals they have sold are selling more.

When you sell Royals you need not fear comebacks or complaints—no worry about repairs or replacements.

We are making preparations to supply a large number of new Royal dealers this fall, giving them the same intensified service that present Royal dealers receive.

THE P. A. GEIER COMPANY
5121 St. Clair Ave., Cleveland, Ohio

Use Standard Panels

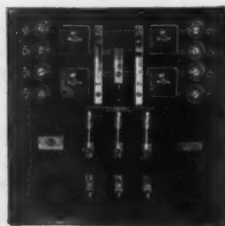
for N. E. C. and plug fuses—knife, snap or push switches.

In many cases Standard Panels can be used instead of special designs.

Consult our Standard Panel Lists and you in many instances will be saved the trouble, delay and expense incident to drawing specifications.

Through feed panels can be eliminated by tapping off the mains to the Terminal lugs of a STANDARD PANEL.

See Catalog 11, pages 94-155.



For Snap Switches

The Trumbull Electric Mfg. Co.
Plainville, Conn.

Dr. Dyno—

is going to visit 10,000 direct-current plants—customers of our jobbers—and he will sell

Seven-in-One

the commutator cleaner perfect

He will be glad to extend his trip to include your mailing list. His product is proven and will show substantial profits.

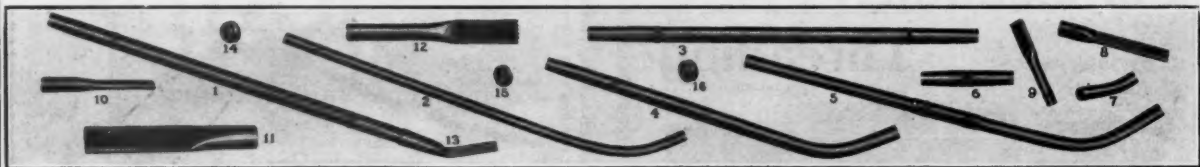
Write for our agency proposition.

Dr. Dyno's seven assistants eliminate SPARKING, FIRING, HEATING, CUTTING, SURFACE SHORTS, OIL SHORTS AND SANDPAPER.

Dyno Utilities Mfg. Co.
608 S. Dearborn St.
CHICAGO



THE SAFEST, LIGHTEST, MOST DURABLE AND RELIABLE MADE



Can you use what we have said in selling Electric Cleaners? You cannot UNLESS the machine is equipped with SPAULDING'S Hard Fibre Attachments, which prevent any possibility of grounds when using the cleaner around pipes, radiators, and other grounded objects. SPAULDING'S Hard Fibre Attachments are insulators—they are safe. They are lighter than metal, stronger than wood, more durable than either, as they will not dent, chip or tarnish, and any reliable manufacturer of Electric Cleaners can furnish them.

J. SPAULDING & SONS CO., Tonawanda, N. Y.

449 Broome St., New York, N. Y.

406 Bessemer Bldg., Pittsburg, Pa.

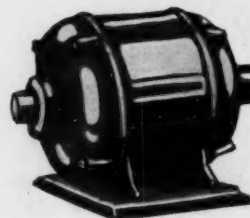
166 No. Clinton St., Chicago, Ill.

GEM WIRE CABLE GRIP

An essential for the wire man and a dollar saving line for you. The Gem patent grip never lets go and never destroys an inch of wire. Gem Grips are made in all sizes. Get our bulletin and open up this profitable line right away.

NORRIS ELEC. SPEC. Co., 38 Park Row, N. Y.

Ring up Spring 4971-4972



We've got a rebuilt Electric Motor for YOUR purpose.

We hold a complete stock from 1-50 H.P. both AC and DC.

American P. I. Co.

48 East 8th Street

New York City

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SEARCHLIGHT SECTION

FOR SALE

Stock Taking Time

Now is the time to turn the surplus stock of metals you have on hand into cash. We buy all grades of scrap metals, small lots as well as large lots. Write us today and tell us what you have and we will be pleased to quote you prices. National Metal & Rubber Company, 30-31 India Wharf, Boston, Mass.

Beware of the Junk Pile

The junk pile is the last resort—a little For Sale ad in this Searchlight Section should be the first and most profitable means of getting money for used equipment. An investment of \$1.50 may bring you some real returns. It has done this for others.

BUSINESS OPPORTUNITIES

Business for Sale

Electrical Specialties Manufacturing Business. Established for five years. Is successful and profitable at this time. Earned and paid dividend last year. Will earn and pay dividend this year. Located near Chicago. A real opportunity. \$30,000 cash absolutely necessary to secure this exceptional business. Box 53, Electrical Merchandising, Old Colony Bldg., Chicago, Ill.

AGENTS AND SALESMEN

Electrical Supply Salesman Wanted

Energetic traveling salesman who understands electrical supplies wanted for Southern territory. Interstate Electric Co., New Orleans, La.

A Big Man Wants a Big Job

Twenty years' experience covering every phase of public utility work: namely—chief clerk, supervisor of new business, publicity and public policy, franchise, elections, power and efficiency specialist and district superintendent—qualifies me for any public utility proposition you have to offer. Past record and credentials prove every campaign a success. Open for immediate proposition. Address 5-G-390 Wadsworth Ave., New York, N. Y.

AGENTS AND SALESMEN

Sales Engineer

University graduate, electric engineer, 5 years' experience, including one year selling experience. Desires selling position with reliable concern. Box 52, Elec. Merchandising, Real Estate Trust Bldg., Philadelphia, Pa.

Business Builder

Young man, twenty-five, married, five years' electrical experience, desires change of job to good live company where efficiency means promotion. Competent of taking charge of new business or sales. Now employed by central station in middle West. Box 51, Elec. Merchandising, Old Colony Bldg., Chicago, Ill.

POSITIONS WANTED

Commercial Manager

Specialist in housewiring, ranges and appliances wishes to secure a larger field. Best of references, can show excellent results, 33 years of age and married. Box 50, Elec. Merchandising, Real Estate Trust Bldg., Philadelphia, Pa.

LEGAL NOTICES

STATEMENT OF THE OWNERSHIP, MANAGEMENT, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, OF ELECTRICAL MERCHANDISING, published monthly at New York, N. Y., for April, 1917.

State of New York } ss.
County of New York }

Before me, a Notary Public in and for the State and County aforesaid, personally appeared Chester W. Dibble, who, having been duly sworn according to law, deposes and says that he is the Assistant General Manager of the McGraw-Hill Publishing Co., Inc., Publishers of ELECTRICAL MERCHANDISING, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the

publisher, editor, managing editor and business manager are:

Publisher, McGraw-Hill Publishing Company, Inc., 239 W. 39th St., New York, N. Y.

Editor, O. H. Caldwell, 239 W. 39th St., New York, N. Y.

Managing Editor, None.

Business Manager, George H. Duffield, 239 W. 39th St., New York, N. Y.

2. That the owners are:

McGraw-Hill Publishing Company, Inc., 239 W. 39th St., New York, N. Y.

Owners of 1% or more of Stock Issued.

James H. McGraw, 239 W. 39th St., New York, N. Y.

Arthur J. Baldwin, 10th Ave. at 36th St., New York, N. Y.

Edward J. Mehren, 239 W. 39th St., New York, N. Y.

Fred R. Low, 10th Ave. at 36th St., New York, N. Y.

Fred S. Weatherby, 1600 Beacon St., Brookline, Mass.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities are: Bondholders: James H. McGraw, Arthur J. Baldwin, Henry W. Blake, Imogene Whittlesey, Hugh M. Wilson, Fred R. Low, Fred S. Weatherby, John McGhie, G. Eugene Sly, Estate of John A. Hill.

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association or corporation has any interest direct or indirect in the said stock, bonds or other securities than as so stated by him.

CHESTER W. DIBBLE,

Assistant General Manager, McGraw-Hill Publishing Co., Inc.

Sworn to and subscribed before me, this 31st day of March, 1917.

[Seal.] PHILIP S. HILL,

(My commission expires March 30, 1918.)

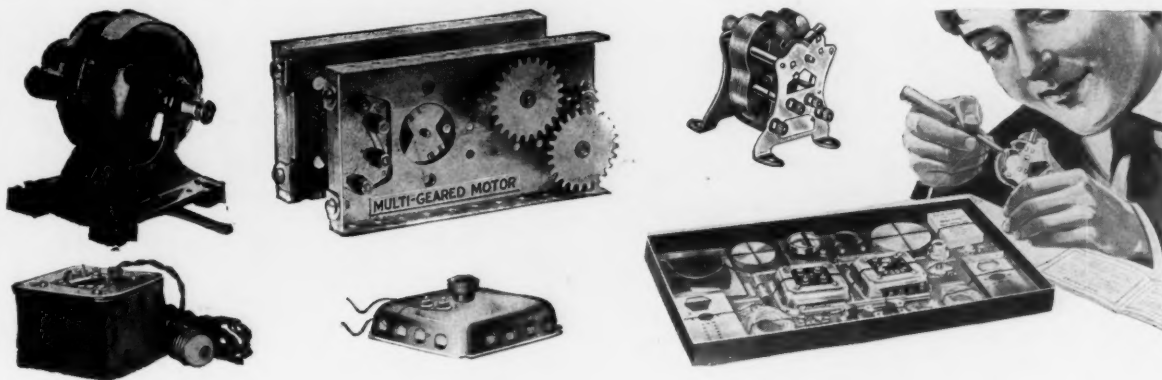
This is the Guide for the Buyer in the Market for Electrical Merchandise

Those concerns which advertise in Electrical Merchandising put their products in the Spot-light of Publicity and live up to the claims they make. They are listed below.

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Phoenix Glass Co.</p> <p>Glassware, Lighting.
Consolidated Lamp & Glass Co.
Ivanhoe Regent Works
Lighting Studios Co.
National X Ray Reflector Co.</p> <p>Globes, Shades, etc.
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Bayley & Sons, Inc.
Century Mfg. Co.
Consolidated Lamp & Glass Co.
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Lighting Studios Co.
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Westinghouse El. & Mfg. Co.</p> <p>Motors, Fractional H. P.
Westinghouse El. & Mfg. Co.
Wisconsin Electric Co.</p> <p>Motors, Rebuilt.
American P. I. Co.</p> <p>Panel-boards.
Adams-Bagnall Electric Co.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Plugs, Attachment.
Pass & Seymour, Inc.</p> <p>Pole Line Hardware.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Protective Devices, Electric.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Pumps, Electric Garage.
Hartford Mch. Screw Co.</p> <p>Ranges, Electric.
General Electric Co.
Hughes Electric Heating Co.
Westinghouse El. & Mfg. Co.</p> <p>Receptacles.
Benjamin Elec. Mfg. Co.
General Electric Co.
Pass & Seymour, Inc.</p> <p>Receptacles, Sign.
Gleason Mfg. Co., E. P.
Westinghouse El. & Mfg. Co.</p> <p>Rectifiers, Mercury Arc.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Reflectors.
Adams-Bagnall Electric Co.
Frink, Inc., I. P.
General Electric Co.
Ivanhoe Regent Work.
National X-Ray Reflector Co.
Phoenix Glass Co.
A. B. Wilson Co.</p> <p>Resistance Units.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Rheostats.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Roller Chains.
Chain Belt Co.</p> <p>Rosettes.
Pass & Seymour, Inc.</p> <p>Schools.
Alexander Hamilton Institute.</p> <p>Searchlights, Electric Auto, Etc.
Pittsburgh Electric Specialties Co.</p> | <p>Shade Holders.
Adams-Bagnall Electric Co.
Wilson Co., A. B.</p> <p>Shows, Electric.
Electrical Exposition & Motor Show</p> <p>Signs, Electric.
Bagge's Electrograph System.
Century Mfg. Co.
National X-Ray Reflector Co.</p> <p>Sockets.
Benjamin Elec. Mfg. Co.
General Electric Co.
Pass & Seymour, Inc.</p> <p>Sprockets, Silent Chain.
Link Belt Co.</p> <p>Stoves, Electric.
Hughes Electric Heating Co.</p> <p>Supplies, Electrical.
General Electric Co.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Switchboard Fittings.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Switchboards.
General Electric Co.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Switches.
General Electric Co.
Pass & Seymour, Inc.
Westinghouse El. & Mfg. Co.</p> <p>Switches, Time.
Westinghouse El. & Mfg. Co.</p> <p>Taps and Dies.
Greenfield Tap & Die Corp.</p> <p>Telephones.
Western Electric Co.</p> <p>Testing Laboratories.
Electrical Testing Laboratories.
Westinghouse El. & Mfg. Co.</p> <p>Testing Service, Electrical.
Electrical Testing Laboratories.</p> <p>Theater Dimmers.
General Electric Co.</p> <p>Tools, Linemen's.
Western Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Tools, Portable Electric.
Wisconsin Electric Co.</p> <p>Transmission, Machinery.
Link Belt Co.</p> <p>Transmission, Silent Chain.
Link Belt Co.</p> <p>Transformers.
Adams-Bagnall Electric Co.
General Electric Co.
Westinghouse El. & Mfg. Co.</p> <p>Vacuum Cleaners, Electric.
Eureka Vacuum Cleaner Co.
Hoover Suction Sweeper Co.
Hotpoint Elec. Heating Co.
Hurley Machine Co.
Innovation Electric Co.
National Sweeper Co.
United Electric Co.
Western Electric Co.
Wisconsin Electric Co.</p> <p>Vibrators.
Shelton Electric Co.</p> <p>Washing Machines, Electric.
Brokaw-Eden Mfg. Co.
Hurley Machine Co.
Western Electric Co.</p> <p>Window Displays.
Doty & Scrimgeour Sales Co.</p> <p>Wires and Cables.
General Electric Co.
Habitshaw Elec. Cable Co.
Western Electric Co.</p> <p>Wiring Devices.
General Electric Co.</p> <p>Wire, Grippes.
Norris Electric Spec. Co.</p> |
|--|--|---|--|

Save This Issue Because—It is the intention of the publishers of *Electrical Merchandising* shortly to present a new form of index of unusual value to readers. To get full benefit from it, it will be necessary for you to save each issue.



GILBERT ELECTRICAL SETS and Electrical Accessories for Boys

Here's a big, new profitable field of sales for electrical dealers—Gilbert Electrical Sets and Wireless Outfits for boys. They are thoroughly practical outfits and we have already found out that there is a big demand for them.

Gilbert Electrical Sets teach a boy the fundamentals of Electrical science—how to construct motors, electric magnets, how to wire for door bells, electric lights, operate electric models, etc.

The sets retail for \$1.00, \$2.50, \$5.00 and \$10.00 (Canada, \$1.50, \$3.75, \$7.50 and \$15.00), and each contains a very complete Manual of Instructions, illustrated in detail and written in such simple, plain language that any boy can understand it.

The sale of these sets will yield you a good profit and also lead to a demand for Gilbert Electrical Accessories—motors, transformers, control switches, etc., on which you can make additional profits.



GILBERT WIRELESS OUTFITS Practical, Complete

The toy that is the sensation of the year. Big orders being booked from dealers everywhere. Sure to be a big seller because of the great popular interest in wireless—especially on the part of boys.

There is just one outfit, selling for \$5.00 (Canada \$7.50) which is known as a house-to-house set and is a practical working outfit. With it the boy will be able to send and receive signals from house to house at a distance of 100 to 300 feet.

The set contains two complete outfits so that two boys may work together, each having a sending and receiving set in his house. It teaches all the fundamental principles of wireless without having to purchase expensive apparatus and **does not interfere with any of the Government regulations**, therefore greatly increasing many times the field for the sale of this outfit.

This Gilbert Wireless Toy Outfit fits into the demand

created by boys for a low-priced, efficient wireless set.

Handsomely printed Manual included with each set contains simple and complete instructions for installation, as well as detailed information for sending and receiving messages.

The outfits are complete in every respect and can be operated more and more efficiently as the boy practices and studies the manual.

A Big Advertising Campaign Back of GILBERT TOYS Window and Store Helps and Service

A great many thousands of dollars will be spent this year in advertising Gilbert Wireless Outfits and Gilbert Electrical Sets. The Saturday Evening Post and all the leading publications for boys will be used, with large ads, telling about the fun and the knowledge of electricity that can be had through the purchase of these practical Gilbert outfits.

We furnish dealers who stock these goods with some very fine window and store display helps—and back them up with real service that helps sell the goods quickly.

Write today for full details about these sets. Get this new business that is bound to grow bigger with each succeeding year.



The A.C. Gilbert
CO.

430 BLATCHLEY AVE., NEW HAVEN, CONN., U. S. A.
Canadian Representatives, Menzies & Co., Limited, Toronto, Ontario

GILBERT TOYS "Year-Round Favorites"

ERECTOR
BRIK-TOR
ELECTRICAL SETS
WIRELESS OUTFITS
TOY MOTORS
MECHANICAL TOYS
BELL TOYS
MYSTO MAGIC SETS
PUZZLE PARTIES

Whatever the Desired Feature May be, You Can Give it With a R. & M. Fan

Whether it is light weight, pleasing design, attractive finish, quiet operation, low current consumption or long life that the customer wants most, you can meet the demand with a Robbins & Myers Fan and clinch the sale.

The drawn steel frame and base used in all R. & M. Fans, make them so light in weight that a child can carry them from room to room.

The graceful lines of the fans appeal to everyone and the finish is as fine as the finish of the best piece of furniture. The felt pad on the base permits the fan to be placed on any piece of furniture without injury to the finish.

All R. & M. Fans operate quietly, and where extra quiet operation is required they can be supplied in the silent six-blade construction.



Their reliability and long life have won the favor of all dealers who have had experience with them, and in point of operating efficiency they meet the most exacting requirements.

And your customers know about these quality features of Robbins & Myers Fans. Ten years of persistent advertising in the leading magazines have made them favorably known to everyone.



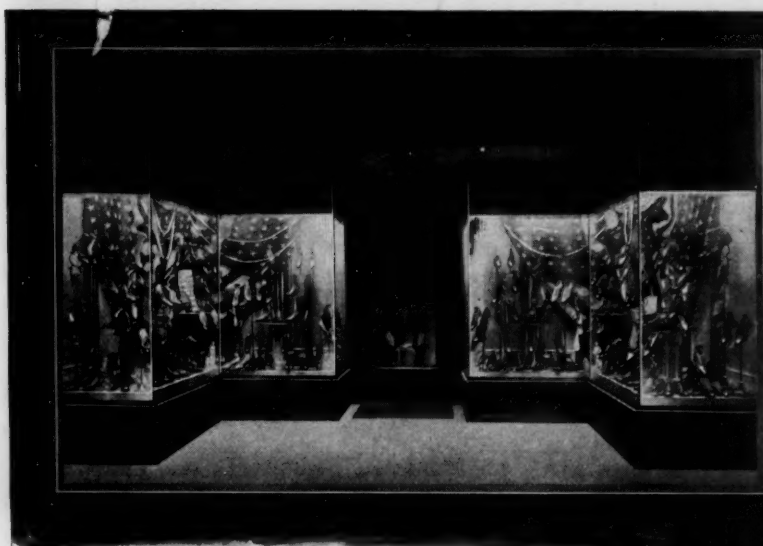
When you point out the quality features of R & M Fans to your customers, you confirm the opinion they already have of these fans, and easy sales are the result.



The Robbins & Myers Company
SPRINGFIELD, OHIO

New York Boston Philadelphia Buffalo Cleveland Cincinnati Chicago St. Louis San Francisco

Robbins & Myers Fans



The Beacon that Beckons the Public

Store rents are based on the number of passers-by. Store profits depend on the number who see the wares displayed and are led to purchase.

The MAZDA Lamps that make the Statue of Liberty radiant at night—will do the same thing for the stores of your city. Their bright white light will make their windows pay the rent. Edison MAZDA Light has a "stop and look" appeal that stimulates the desire to buy the goods displayed.

Put the stores in your community in a class with the best lighted shops in America. Make a summer canvass of this business for Edison MAZDA. Show them how to do it.

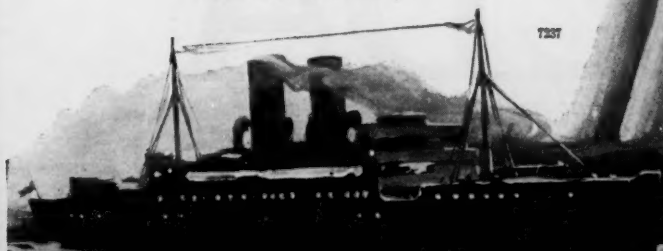
Show them the possibilities of Edison MAZDA C Lighting for both windows and interiors.

Get a few stores started right and the rest will follow.

Begin with your own windows.

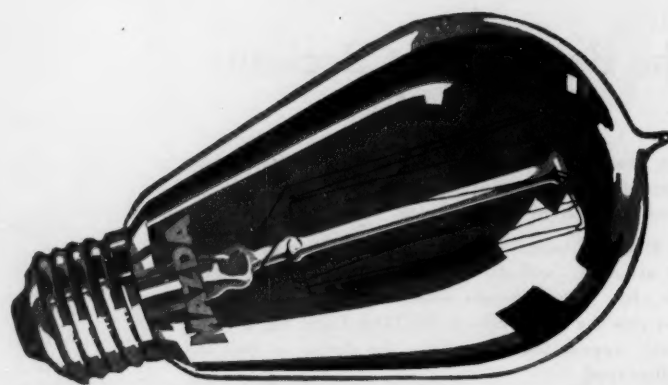
EDISON LAMP WORKS

OF GENERAL ELECTRIC COMPANY
HARRISON, N. J.



EDISON MAZDA LAMPS
MADE IN U.S.A. AND BACKED BY MAZDA SERVICE

Scientific study coupled with practical manufacturing methods—this is the basis of the MAZDA Service that helps lamp-makers produce better lamps.



MAZDA

"Not the name of a thing, but the mark of a service"

The Meaning of MAZDA

MAZDA is the trademark of a world-wide service to certain lamp manufacturers. Its purpose is to collect and select scientific and practical information concerning progress and developments in the art of incandescent lamp manufacturing and to distribute this information to the companies entitled to receive this Service. MAZDA Service

is centered in the Research Laboratories of the General Electric Company at Schenectady. The mark MAZDA can appear only on lamps which meet the standards of MAZDA Service. It is thus an assurance of quality. This trademark is the property of the General Electric Company.



RESEARCH LABORATORIES OF GENERAL ELECTRIC COMPANY



DOUBLE Protection for Buyers of G-E Fuses



The G-E Monogram—

long established as the guarantee of excellence on all goods electrical.

The Official Underwriters' Label—

G-E fuses are under constant inspection at the factory by engineers of the Underwriters' Laboratory.

Fuses are electrical safety valves. The protection of electrical equipment is dependent upon their accuracy.

Economy in fuse buying is dependent upon the amount of safety purchased. G-E enclosed fuses are the most economical because their absolute reliability under all conditions can be depended upon.

G-E Reliable Wiring Devices are sold
by distributors in all large cities

General Electric Company

General Office:



Schenectady, N. Y.



Thor

Wartime Necessities

The demands for factory help and household help are already seriously competitive. This condition will become more and more acute.

The economical housewife—the patriotic woman—will attend to her own household duties.

THOR products will enable her to “do her bit” and with the least sacrifice of time and labor.

HURLEY MACHINE COMPANY

155 West 42nd Street, New York

35 S. Clinton Street, Chicago

The Only Complete Line of Electric Washers, Vacuum Cleaners and Ironing Machines
A Size for Every Family

A Style for Every Purse



—and the Gateway to Bigger Profits for you if you use it right

So far as your customer is concerned it is at the socket that electric service begins.

It is at the socket that he controls the service.

The socket is something that he can easily understand. It moves—it works.

And it is precisely because of this important simple and easily demonstrated function of



P & S No. 90 Pull Chain Socket.
Becoming more and more popular
for fixtures in first class residence
work.

P & S Sockets

that you can use them as selling points to easily and quickly interest your customer in the detailed quality of *all* the electrical equipment you want to sell him.

There is a lot to tell a man about P & S sockets, not only about a particular socket, but about their proper uses and why different sockets and wiring devices should be used for different purposes.

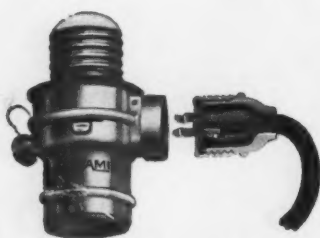
You will find a lot of valuable suggestions along that line in our little booklet called "The Gateway of Electric Service." We would like to send you a copy of it.

Pass & Seymour, Inc., Solvay, N. Y.

BENJAMIN

and the Plug Current Tap

“Judgment is the
Lodestone
of Imagination”



Benjamin Products:

Wireless Clusters Plug Clusters
Sockets Wiring Devices
Attachment Plugs
Stand Lamp Clusters Reflectors
Street lighting Units
Store and Office Fixtures
Gas and Vapor Proof Fixtures
Industrial Lighting Units
Show Case Lighting
Panel Boards Factory Signals
Safety Devices for Punch Presses
Screw Drivers Tool Sets

Judgment scrutinizes every product of imagination.

It points out the feasible—winnows the chaff from the wheat.

Newton's imagination discovered the law of gravitation; his judgment verified and finally accepted it as truth.

Imagination created the Benjamin Current Tap.

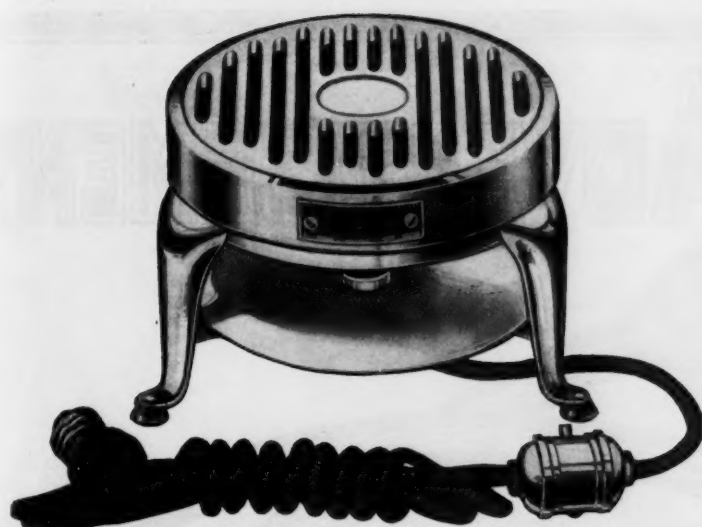
Benjamin Judgment marked it as a practicable combination of socket and attachment plug.

Imagination and Judgment pronounced it good. Use has branded it a necessity—another of the electrical creations of Benjamin men with the indelible stamp of Benjamin character.

BENJAMIN ELECTRIC MFG. CO.
CHICAGO

NEW YORK : SAN FRANCISCO : TORONTO : LONDON

AN INSTITUTION BUILT ON IDEAS



Hughes "5"

Heavy Duty

Table Stove

for

Lamp Socket Use

—a Sales Maker for Dealers

FEATURES:

FINISH: Highly polished nickel plate throughout.

CONVENIENCE: Controlled by a switch conveniently located for use at the table.

EQUIPMENT: Rubber-tipped legs and heat shield to protect the table. Also seven feet of cerise mercerized special Hughes asbestos cord.

DIMENSIONS: Height 5 inches; diameter of burner $6\frac{1}{2}$ inches. Consumption 660 watts.

UTILITY: Club rooms, sick rooms, nurseries, summer homes, light housekeeping rooms, training camps, soda fountains, bachelor quarters, studios and doctors' and dentists' offices, etc.

The Hughes "5" Table Stove is one of the recent additions to the Hughes Range family—having the same sturdy construction and well-known Hughes Burner with its special insulating brick, which is famous for its heat-retaining properties.

The Hughes "5" will do more work in shorter time and at less expense than any table stove on the market today. It is for use on a lamp socket, consuming only 660 watts, and is ideal for preparing breakfasts. It will cook an entire breakfast on the stored heat in the burner—after the coffee has been made.

It does not require demonstration nor intensive salesmanship. It sells at sight. Retails at only \$7.00. Think of it—this little electric stove may be used anywhere, any time, for any cooking or heating purpose.

If you doubt its rapid sales, only order one. The first sale will convince you of its sales possibilities. Send for dealer's discounts and other information.

Hughes Electric Heating Co.

5660 W. Taylor Street, Chicago

WHOSE ADVERTISEMENT

IT'S UP TO YOU

Whether or not you make it your own.
There are eight of the most popular of the line of

Western Electric
QUALITY PRODUCTS

shown in this advertisement which will appear in the
June 30th, **Saturday Evening Post** and in other popular
magazines shortly thereafter.

Are you going to avail yourself of an opportunity
to tie up to it by sending for our free sales helps
to use in local advertising.

If you do, our advertisement is yours—
because it is going to direct business to
your store.

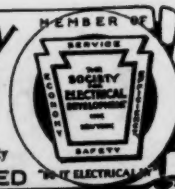
A card to our nearest
house will do the trick.



Western Electric Company
INCORPORATED

New York	Atlanta	Chicago	Kansas City	San Francisco
Buffalo	Richmond	Milwaukee	St. Louis	Oakland
Newark	Savannah	Indianapolis	Dallas	Los Angeles
Philadelphia	New Orleans	Detroit	Houston	Seattle
Boston	Birmingham	Cleveland	Oklahoma City	Portland
Pittsburgh	Cincinnati	Minneapolis	St. Paul	Omaha
			Denver	Salt Lake City

EQUIPMENT FOR EVERY ELECTRICAL NEED



IS THIS ?

THE SATURDAY EVENING POST

Why Have Two Standards of Efficiency?

Home Manager

YOUR wife—your home manager—is entitled to labor-saving equipment just as much as the manager of a business office, store or factory.

Take efficiency home with you. You are accustomed to every modern time and labor saver in your work. Your wife needs modern equipment, too. It will reduce housekeeping expense just as it cuts business costs. It will eliminate drudgery and tedious tasks in the home just as it does in business.

See what electricity will do! Carry the application home. Make the summer work easy to do and the hot weather easy to bear. Provide your wife with

Western Electric Household Helps

The electric iron, the vacuum cleaner, the washing-machine, the portable electric sewing-machine, the electric dish washer, and the numerous other labor-saving conveniences, will put an end to the drudgery of housework—perhaps even replace one of your servants, and certainly make them more contented in their work.

And remember that when you invest in these devices you help your wife meet the rising cost of living, for while most necessities are increasing in price the cost of current grows steadily less.

As a starter for a square deal to your wife and one single standard of efficiency, send today for a copy of our booklet, "Mrs. Bright's Way." Ask for No. 71-Q.

WESTERN ELECTRIC COMPANY
INCORPORATED
195 Broadway, New York City
Branches in All Principal Cities of the United States and Canada

Western Electric

Why get on with the heat this summer? Get Western Electric Fans and keep cool. The Electric Fan costs only \$5.00 and is sold at the Post.

Why get on with the back-breaking, dusty summer? Use the Western Electric Vacuum Cleaner. It will clean your carpets, your floor and your furniture.

Why invest your money in a hot stove? Use the Western Electric Electric Stove. It will save you money and keep you comfortable.

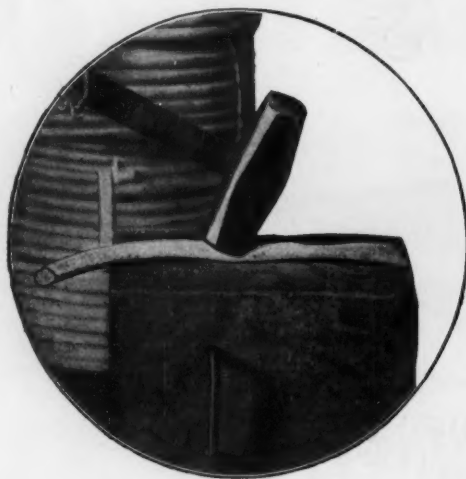
Why get on with the old-fashioned, slow sewing? Use the Western Electric Sewing Machine. It will save you time and money.

Why get on with the old-fashioned, slow washing? Use the Western Electric Washing Machine. It will save you time and money.

Why get on with the old-fashioned, slow ironing? Use the Western Electric Electric Iron. It will save you time and money.

Why get on with the old-fashioned, slow vacuuming? Use the Western Electric Vacuum Cleaner. It will save you time and money.

Why get on with the old-fashioned, slow dish washing? Use the Western Electric Dish Washer. It will save you time and money.



Bang away
on
DURADUCT

(Reg. U. S. Patent Office)

An accidental hammer blow will flatten Duraduct but it has the "come back."

You can't hurt it because it is a single wall conduit.

There are no layers to pull away from each other.

This is but one of the exceptional features you obtain only in Duraduct.

All good jobbers sell Duraduct.

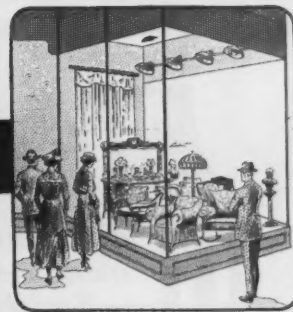
TUBULAR WOVEN FABRIC COMPANY
MANUFACTURERS — PAWTUCKET, R. I.
GENERAL SALES AGENT — A HALL BERRY
71-73 Murray St., New York. 9 So. Clinton St., Chicago

Northern Electric Company Distributors for Canada
LIMITED

THE BLACK DOTTED LINE IS THE MARK OF
DURADUCT



The Old Way—Glaring Lights
Drive Away Business



The New Way—Holophane
922 Eliminates Glare and
Attracts Customers

Just out!—"Holophane 922"

A scientific window-lighting unit that will make an instantaneous hit with the merchants of your city

HERE at last is the perfect window lighting unit, Holophane 922, the unit that keeps the light off of the sidewalk and out of the eyes of the people—and directs it on the display.

A prismatic glass shield protects the eye from the glare of the lamp filament and increases the illumination on the trim—an exclusive Holophane idea worked out on Holophane scientific principles.

Entire unit made of prismatic crystal glass, unaffected by heat.

Maximum illumination on a given current expenditure. Low cost—easily installed.

SPECIAL 30-DAY OFFER

June 20 to July 19

During the period named above, we will include **FREE** a Form H Holder listing at 40c each, with every 922 ordered in standard package quantities. Ten 922's to a standard package. Using the H Holder with 922 assures the correct position and highest efficiency for the 100-watt Type C or daylight lamp.

**ACT NOW—DON'T DELAY—SEND IN
YOUR ORDER TODAY**

HOLOPHANE GLASS CO., Inc.

340 MADISON AVENUE

NEW YORK



DETACH AT DOTTED LINE AND MAIL TODAY
HOLOPHANE GLASS CO., INC.
340 Madison Avenue
New York City

Please send us
Reflector at \$3.50 each
Holders which list at 40c each.

Date..... 1917

standard packages of 10 Holophane No. 922 Window
Reflectors at \$35.00 discount, P.O. Newark, Ohio,
FREE the understanding that you will include,
Holders, which list at 40c each.
Send us No. 922 fold-
ers with our imprint as
above.

Hotpoint

Electric Tableware

distributed among electrically-wired homes of your community means—

—Satisfied consumers due to the High Standard of quality and perfect electrical and mechanical construction of Hotpoint Appliances.

—Additional current consumption during the summer months when light bills are low.

—Substantial profit to central station, dealer and jobber.



Hotpoint
Jetless Percolator
[Aluminum]

A serviceable electric coffee percolator that appeals to the masses. Also made with long spout.



Hotpoint
Jetless Percolator
[6-cup—Nickel]

Made of copper finished in highly polished nickel outside; inside coated with black tin. Made with panel sides also. Another of slightly different design holds 5 cups.



Hotpoint
Jetless Percolator
[Colonial—Machine]

9-cup. Finished same as 6-cup. Used by large families; light-lunch counters and soda fountains.



Hotpoint
Jetless Percolator
[Grecian Urn—Machine]

Beautiful as well as useful. 9-cup. Such of your customers who appreciate the best will buy this appliance. Also made with panel sides.



Hotpoint
Toaster

The National Breakfast Necessity. Makes delicious golden brown toast.

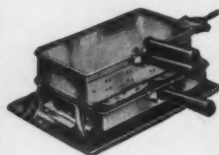
HOTPOINT TABLEWARE IS EASILY SOLD BECAUSE

of the ever-increasing popularity of "COOL COOKING" ELECTRICALLY
of its superior quality of material and workmanship, assures lasting satisfaction and service
housewives know the superior quality of "HOTPOINT" products thru their acquaintance with the world-famed HOTPOINT IRON, of which over 2,500,000 are in use.
Hotpoint National Advertising keeps Hotpoint products in the public eye consistently. NEXT HOTPOINT AD APPEARS IN THE JUNE 10TH SATURDAY EVENING POST—it's a double page—two-color center spread and features "COOL COOKING" Hotpoint Tableware—Hotpoint Iron, Hotpoint Vacuum Cleaner and Range.



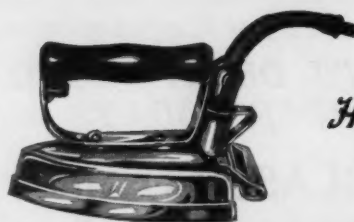
Hotpoint
Ovenette

A small bake and roast oven for use on Hotpoint Radiant Grills or Stove. A great favorite.



Hotpoint
Radiant Grill
[Rectangular]

An "Electric Table Range." Boils, broils, fries and toasts, two operations at cost of one.



Hotpoint
Iron

The Electric Iron that has set the Standard for 13 years—Has hot-point, cool handle, attached stand, "rest the wrist" thumb rest and easily removable hinged plug cord protector.



Hotpoint
Radiant Grill
[3-heat]

Electric Grill and Stove. Boils, broils, fries and toasts: any two operations at same time. Supplied with metal dishes. Also made in single heat.

A POSTAL REQUEST ADDRESSED TO OUR NEAREST OFFICE WILL BRING COMPLETE INFORMATION
HOTPOINT ELECTRIC HEATING COMPANY, Ontario, Calif., Chicago, New York, London

Canadian Hotpoint Electric Heating Co., Limited, Toronto, Can.

HCS 5-13-17

How-I-Did-It

Short Stories of Lamp Sales told by Salesmen to Salesmen



"Hard!" She exclaimed—
Horn's Second Customer.



The Store Manager who
couldn't spend any money
for lamps.



The Manager, in Act I.
"A Private Screening."



"Want bigga da light—ma
place. Watta you got?
Hey?"

A NEW salesman labored two weeks without getting a contract and was about to give up the ship—but he didn't. Instead, he held a conference with himself and decided to adopt new methods, which netted him seven contracts for his third week. There is so much meat in his story that it carried off the first award for May.

Of far greater importance, however, to the writer was the analysis necessary to make a story.

That's one of the big features of a HOW-I-DID-IT story. It benefits the man who writes it as well as those who read it.

This story by Herbert F. Horn, of the Ohio Electric Railway Co., is worth reading twice.

"I can't spend any money for lamps, as they are all sent me from the home office." That's what William S. James, new business manager in Texarkana, ran up against when he tried to interest the manager of a chain store in better window lighting.

His handling of this difficult situation netted his company a 60 K.W. Hr. increase per week in the customer's load. May HOW-I-DID-IT tells all about it.

Remember those two good stories by S. C. Dowling—one in September and the other in November?

He has another in the May number entitled "A Private Screening"—a story concerning an installation that is "a twin sister to some in your town" and dealing with dirt and wrong voltage. If you read his other stories, you know what to expect, and you won't be disappointed.

Tomasso Borago, who wanted "bigga da light," is the leading character in another story—one that you mustn't miss, if you have any Italians to deal with.

May HOW-I-DID-IT is Contributors' Number. It contains a complete list of contributors, with pictures of the first and second award winners. It is your opportunity to get better acquainted with them.

Write for your copy today, if you haven't received it. Ask to have your name placed on the list for future numbers.

Take a pencil this evening and jot down the different moves in one of your own selling experiences. With the notes before you—you'll find it easy to go ahead and construct a HOW-I-DID-IT story.

We want you to become a contributor—to be on the speakers' platform as well as in the audience in the HOW-I-DID-IT salesmen's convention, held every month everywhere.



GUARANTEED BY THE NAME

Westinghouse Lamp Company

165 Broadway, New York

Sales Offices and Warehouses Throughout the Country

Have You Received Your Copy of Our New Small Motor Catalogue No 38

Everything you
want to know about
a complete line of small
motors

You need this information. It is logically and
consecutively arranged in a convenient book,
size 8½x11.

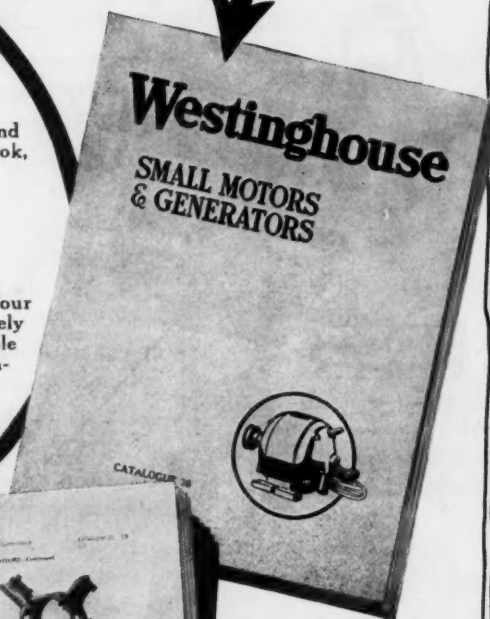
It tells you—

1. What they look like.
2. What they do.
3. How to buy them.

There is a copy for you. Has it reached you? Your
Salesmen and Engineers can use it effectively
solving your small motor problems. A reliable
handbook for Dealers, Jobbers, Central Sta-
tions and Manufacturers.



**Westinghouse Electric
& Manufacturing Company**
East Pittsburgh, Pa.



Westinghouse

UNIVERSAL SUMMER NEEDS

Not including
Plates or Perco-
lator
No. E9688, \$24.50
1500 Watts

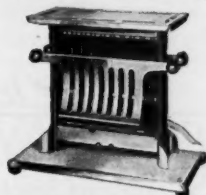


UNIVERSAL

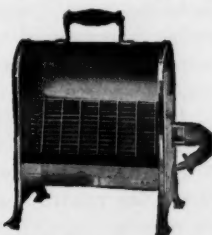
The line of Universal Electric Home Needs is Universal in fame as well as in name.



No. E905—580 Watts, \$5.00



No. E946—340 Watts, \$4.50



No. E9950—625 Watts, \$6.50



No. E984—4 Heats, \$6.50
150, 275, 325, 600 Watts

Their honest workmanship and design, their beauty of line and finish, their common sense practicality win a friend with every purchaser.

Your demand now is for Summer business. The discomforts of torrid weather are lightened by Universal irons, grills and toasters.

The real electric range illustrated is compact, economical, practical and will efficiently prepare a small family's summer meals.

Picture the cheery warmth of the radiant heater during a dreary day of drizzling rain.

Here is your opportunity to sell the goods that won't come back to customers who will. Are you prepared to profit by the demand?

Send in your order today. Catalog 58 describes the line.

LANDERS • FRARY & CLARK
• NEW-BRITAIN • CONNECTICUT •

Electrical Merchandising

Gave it to Them First



THAT which ELECTRICAL MERCHANDISING endeavors above everything else to be known by, is SERVICE.

Serving in a tangible way the selling side of the electrical industry, is the business of ELECTRICAL MERCHANDISING, the monthly journal of the Electrical Trade. It reaches, is read by, and helps, electrical contractors and dealers, jobbers; and the commercial managers and salesmen of central stations over the entire United States.

Not only were the central station men interested in the N. E. L. A. Commercial Section papers and

news which they might have heard and received at the Atlantic City Convention had it been held, but electrical contractors, dealers and jobbers were vitally interested in these all important subjects and as the convention was cancelled, ELECTRICAL MERCHANDISING took the form of a "Convention on Paper."

ELECTRICAL MERCHANDISING for May devoted more than 20 pages to these tremendously important N. E. L. A. Commercial Section subjects. Copy and abstracts of reports and all of this great amount of news along with many pages of other selling data, business build-

ing articles, illustrations and helpful suggestions *reached the desks* of electrical contractors, dealers, merchants and jobbers, central stations, commercial managers and salesmen *weeks before they received the N. E. L. A. reports or the information from any other source.* ELECTRICAL MERCHANDISING specialized on the N. E. L. A. commercial reports and the appliance papers.

ELECTRICAL MERCHANDISING gave it to them *first* which emphasizes our claim of serving the selling side of the electrical industry.

THE value of this service (the May issue of ELECTRICAL MERCHANDISING) to the electrical contractor and dealer was quite as definite as its value to the central station men.

This year's N. E. L. A. papers gave evidence that central station merchandising policies are being shaped to *assist* the dealer instead of competing with him as in the past—that central sta-

tion prices are being raised to a level where the contractor and dealer can prosper—that central station development plans are being extended so as to widen the electrical contractor and dealer's market.

Electrical Merchandising is the electrical merchants' journal.



Realization

For new buildings or redecoration, an opportunity is open to combine the value of luxury with economy in costs.

To 64 years of experience in designing lighting fixtures for America's best-known homes, hotels, apartments, buildings and institutions is added the discovery of a new fixture metal which brings the realization of permanent beauty within the reach of moderate demands.

VANCO-BRONZE THE NEW METAL FOR LIGHTING FIXTURES

has made possible the creation of a wide range of designs for all classes of buildings—designs which add permanent beauty and actual cash value at costs below the average of ordinary fixtures.

Architects, home owners, builders and decorators will be interested in our book of designs and price lists.

MITCHELL VANCE CO., Inc.
Studios, 294 Madison Ave.,
Factory, 507 W. 24th St.,
New York



Sell the Detectifone Without Carrying a Stock

There are hundreds of merchants and business men who will buy the Detectifone if they are simply told where it can be obtained. They do not, as a rule, want to go into the store and talk too much about it, or otherwise parade their needs in order to find out where they can purchase this much-talked-of device.

It's up to you, as a dealer in Electrical Devices, to *show* them you can fill their orders, and if you will make a proper display it will be unnecessary for you to carry a stock.

Our Attractive Window Card Does It

It will crowd the sidewalk in front of your store.

It is an attention-compelling ad, containing a large illustration similar to the one shown above, as well as all other information a prospective customer wants to know. During present war times the Detectifone is proving especially attractive.

If you want to know how to fill these waiting orders at *full profit*, write us on your letter head or send us your business card with your inquiry. Write today.

Carl Anderson Electric Corp.
145 West Thirty-Sixth St.
New York City




The "Tel-Tap" for Tapping Telephone Lines insures courteous and attentive employees. Intercommunicating and Sound-Transmitting Devices.

Consulting and Sole Manufacturers of Secret Service Devices to Five Governments.

Telephone, Greeley 1248.





er

than through—

The eyes of an army are the airplanes. The enemy now has almost as many airplanes as the Allies —and can see almost as much. A preponderance of airplanes means victory at a minimum cost of lives. The United States only can furnish these machines and the necessary operators and equipment, for she has the material, shops and explosives. We need 50,000 machines and 10,000 aviators quickly—every day's delay means sacrificing the lives of thousands of our soldiers.

Fortifications of concrete, trenches, wire entanglements and all such obstacles mean a frightful loss of life to overcome by going through them, but by going over them in such numbers as to put the enemy airplanes completely out of action, explosives may be dropped on enemy batteries, transport lines, submarine bases, manufacturing plants, munition depots, battleships or troops at will.

Blind the eyes of the enemy by overwhelming his air squadrons, and we will win with the smallest loss of life.

UNCLE SAM NEEDS TOP PRODUCTION

Every mill, every factory, every shop must be speeded up to meet the urgent needs brought about by the entry of this country into the Great War.

The government's requirements come first. This means more than guns, ammunition, ships and clothing. It means that practically every manufacturing activity must be mobilized that in any way contributes to the production of war supplies.

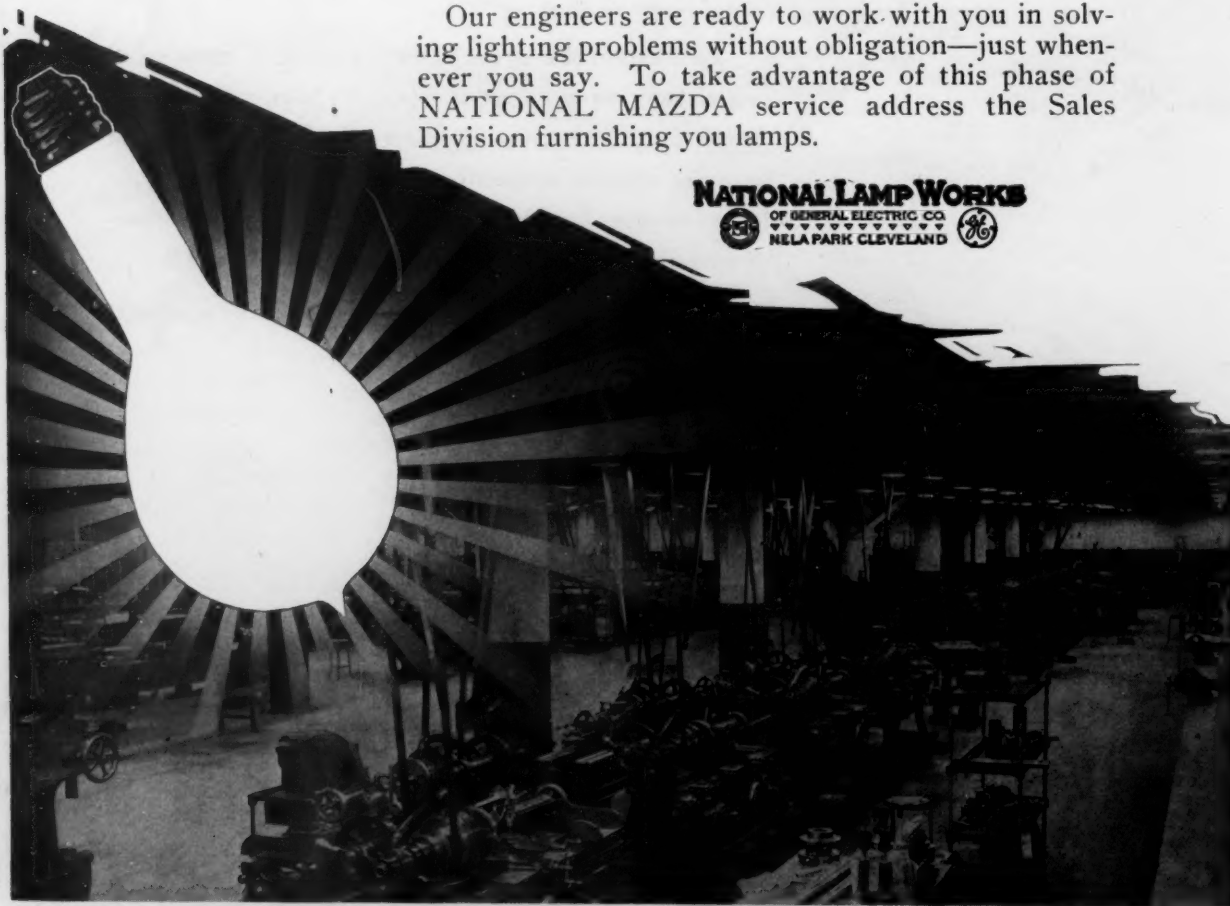
It means, too, that not only must American industry provide for this nation's wants but for a large part of the people of Europe.

Top production is reached only when there is plenty of light, well diffused. In adequately lighted shops the worker gains confidence that leads to precision. Spoilage and seconds are fewer—mistakes and accidents rarer.

Pick out the shops, mills and factories in your neighborhood. With such a list you have an opportunity for big sales during the next few months in NATIONAL MAZDA C LAMPS and other lighting equipment.

Our engineers are ready to work with you in solving lighting problems without obligation—just whenever you say. To take advantage of this phase of NATIONAL MAZDA service address the Sales Division furnishing you lamps.

NATIONAL LAMP WORKS
OF GENERAL ELECTRIC CO.
NELA PARK CLEVELAND



[illegible]

**← This One Ad, *One Time*,
Cost \$115—But Sold**

37 Hoovers

Valued at Over \$2,000!

The ad was supplied to Mr. Burgkart by the Hoover Advertising Service. Read his letter. Paid a handsome profit in immediate sales. All the general publicity was therefore *free!*



With Patented Motor-Driven Brush

PHILLIP GROSS Pres.

ARTHUR E. GROSS Vice Pres.

CHAS. E. MUELLER

THE LARGEST ESTABLISHMENT OF ITS KIND IN THE NORTHWEST
ESTABLISHED 1868

PHILIP GROSS HARDWARE CO.

216 218 220 THIRD STREET

TELEPHONE GRAND 116

WHOLESALE

AND RETAIL

EVERYTHING IN HARDWARE

MILWAUKEE, WIS.

April 24, 1917.

OUR NEW HOME

DEPARTMENTS

MACHINE SHOP SUPPLIES

Mill and Factory Supplies
"Jewell" Leather Baling
"Sturven" "B" "B" "B" "B"
"Machinists" Tools
"Cleveland" Twist Drills
"Cord" Taps and Dies
Electric Drills and Grinders
"Yale & Town" "Harrington"
Chain Hoists

BUILDERS HARDWARE

"Yale" Locks and Knobs
Roofing and Building Paper
"Reynolds" Asphalt Shingles
"Dyplax" Joint Fillers
Contractors Supplies

AUTOMOBILE SUPPLIES

Auto Tires and Tubes
Motor Generator Sets
Storage Batteries
"Klean" Horns
"Stewart" Speedometers
Oils and Greases
"FORD" Accessories

SPORTING GOODS

Kodak Supplies
Guns and Ammunition
Fishing Tackle, Bicycles
Tennis and Golf Supplies
Baseball and Football Outfits

CUTLERY

Knives- Razors- Carvers- Shears
Sterling and Silver Plated
Table Cutlery

GENERAL HARDWARE

Mechanics Tools
Drawing Instruments
Lawn Mowers and Hose
Manual Training Equipments

KITCHEN FURNISHINGS

"Detroit Jewel"
Coal and Gas Ranges
"Behn Stryker" Refrigerators
Copper and Nickel Plated
Chafing Disks-Percolators
Bath Room Fixings
Hotel Equipments

ELECTRICAL

Household Appliances
"Apex" Wash Machines
"Hoover" Vacuum Cleaners

Mr. H. W. Hoover,
c/o Hoover Suction Sweeper Co.,
New Berlin, Ohio.

Dear Sir:-

The writer has been out of town for the past week, and upon returning finds your letter of the 19th, with reference to the Milwaukee Journal ad of April 2nd.

Advertising of this sort appeals to me. I will be frank in telling you that we had good results. Our inquiries on the telephone were approximately forty, and about twelve coupons were returned. The Real Estate Show followed shortly after this ad, and we could not begin to tell you of the number of people that mentioned seeing our ad in the Journal.

The five day free trial proposition is a business getter, and we cannot find where it would prove objectionable in any way. We will repeat this ad next month, and shall be glad to inform you of our results.

We sold approximately 75% of our inquiries, and know that you will think this is good business.

Trusting we may be of service to you, we remain,

Yours very truly,

PHILIP GROSS HARDWARE CO.

PER

AH3/IR

Regularly each month we furnish all Hoover dealers with ads from 6 inches single column up to full pages, *live ads that actually sell the goods*, like the one here shown.

No wonder, in 1916, hundreds of Hoover dealers made sales like these:

In towns of less than 1,000: sales such as \$1,509.00, \$2,093.90, etc. **Cities 1,000 to 10,000:** \$1,614.80, \$1,587.60, \$3,032.40, \$3,316.65, etc. **Cities 10,000 to 40,000:** \$8,329.90, \$5,842.80, \$14,831.62, \$8,064.60, \$9,202.60, \$6,200, etc. **Cities, 40,000 to 100,000:** \$14,693.87, \$9,056.00, \$18,374.55, etc. **Cities of larger populations:** \$22,949.25, \$44,311.30, etc.

We'll Enable YOU to Do Fully as Well

Write for *proof*. Better still, send us an order for demonstrators.

Don't pass up profits like these.

**The Hoover Suction
Sweeper Co.**
Box 905 New Berlin, Ohio



Property Protection

The cost of a man's house in dollars and cents does not completely measure his need for protection.

The man who owns a luxurious mansion is frequently in a better position to rebuild than the man who owns a modest cottage.

But every kind of house should be properly protected.

One of the most important means of protection in any house is good insulated wire. Every man who owns any kind of building can have protection with ECCO Wire.

Many of the handsomest and costliest residences of the country, as well as small cottages and buildings of all kinds, use ECCO because it not only gives positive protection, but also because it costs so little more—\$5 on a \$5,000 house.

Electrical Contractors would rather work with ECCO than with cheap wire. They have written us to that effect. One writes as follows:

"We can save more money by paying more for ECCO wire and using it than we can by using a cheaper grade of wire."

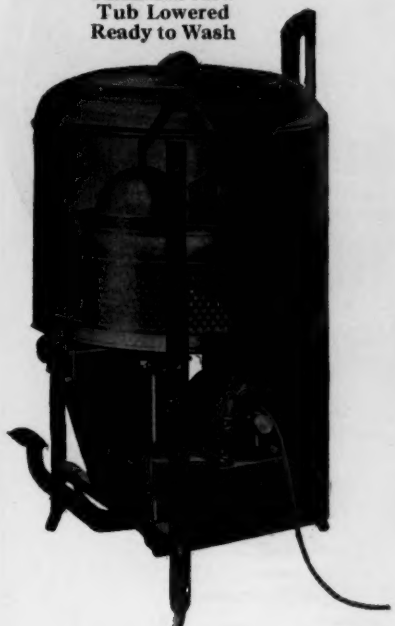
THE ELECTRIC CABLE CO., 10 East 43d St., New York
Makers of ECCO Wire for every purpose where rubber covered wire is used

ECCO Dependable Insulated WIRE

LAUN-DRY-ETTE

Get away from washing machine competition by selling a machine that does *more*—sells quicker and more profitably.

Phantom View
Tub Lowered
Ready to Wash



Your customers know that washing machines—WASH.

Show them that the Laun-DRY-ette washes clothes and DRIES them and the whole grist of washing machine competition is at once removed.

The Laun-DRY-ette dealer gets the business.

It does all that any washing machine can do, and MORE. In the Laun-DRY-ette the housewife washes and dries a tubful of fabrics, from blankets to laces, in eleven minutes—10 minutes to wash and 1 minute to dry.

Phantom View
Tub Raised
Ready to Dry



You are protected] by our real guarantee of satisfactory service.

Write us now for our attractive selling proposition.

Be the one to get Laun-DRY-ette profit in your town.

The Home Specialty Co.
Cleveland, Ohio

Send me your attractive selling proposition
Name
Address

Mail the Coupon To-day

The Home Specialty Co. Cleveland, Ohio



"I Want Them Hooked Up With Chain"

SAYS the manager who demands increased production. He wants power transmission without slip or loss. The positive Silent Chain Drive makes every minute of working time effective. The quality of output is improved because of the smooth, steady pull of the

LINK-BELT SILENT CHAIN DRIVE

LINK-BELT SILENT CHAIN users have shown us many instances where the production has been increased 10% to 20% over machines driven by leather belts. *You can do the same in your plant, factory or mill. Write us for the facts, and tell us what type of machinery you wish to drive.*

LINK-BELT SILENT CHAIN is the ideal method of transmitting power. An efficiency of over 98% is maintained under all conditions, on long or short centers, in hot, cold, damp or oily places; in intermittent or constant service. Write for Data Book No. 125—the handbook of silent chain driving.



Look for the Name on the Washers.
Look for the Liners in the Joints.

LINK-BELT COMPANY

PHILADELPHIA

New York 299 Broadway
Boston 49 Federal St.
Pittsburgh 1501 Park Bldg.
St. Louis Central Nat'l Bank Bldg.
Buffalo 698 Ellicott Square
Wilkes-Barre 2d Nat'l Bank Bldg.
Cleveland 1204 Rockefeller Bldg.
Detroit 702 Dime Bank Bldg.
Minneapolis 418 S. Third St.
Kansas City, Mo. 407 Finance Bldg.

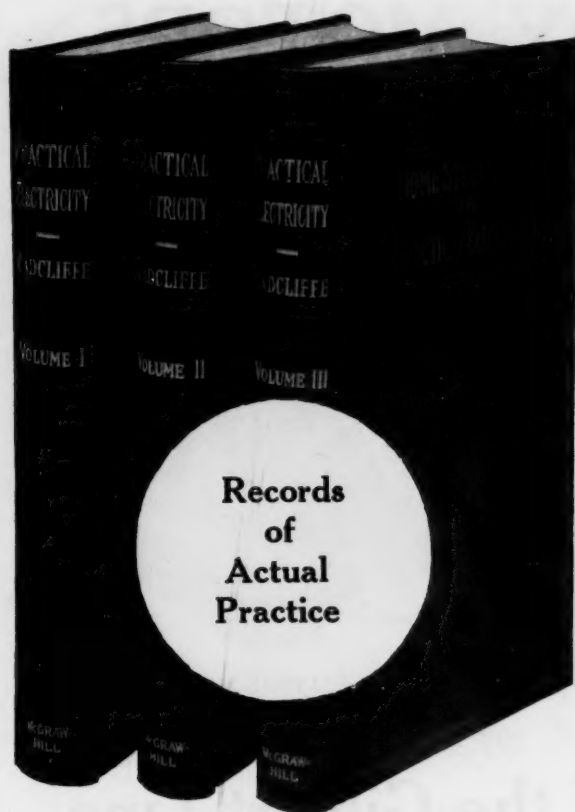
CHICAGO

Knoxville, Tenn. Empire Bldg.
Seattle 678 First Avenue, S.
Portland, Ore. 14th and Lovejoy Sts.
San Francisco 461 Market St.
Los Angeles 161 and 163 N. Los Angeles St.
Denver Lindrooth, Shubert & Co., Boston Bldg.
Louisville, Ky. Frederick Wahle, Sparks Bldg.
Birmingham, Ala. D. T. Haskoy, Am. Trust Bldg.
New Orleans C. O. Hims, Hibernia Bank Bldg.
Charlotte, N. C. S. S. Cotnam, Com'l Bank Bldg.

INDIANAPOLIS

Toronto, Can. Canadian Link-Belt Co., Ltd.





The Home Study Course in Practical Electricity Will Give You Data On—

VOL. I—Leading Principles. Electrical Units. Conductors and Insulators. Calculation of Resistance. Electrical Circuits. Primary Battery Cells. Storage Battery Cells. Magnetism. Electromagnetic Induction. Direct-Current Generators. Alternating Currents. Alternating-Current Generators.

VOL. II—Transformers. Electric Measurements and Instruments. Switchboards. Switchboard Wiring and Operation. Station Wiring.

VOL. III—Direct - Current Motors. Alternating - Current Motors. Motor-Generators, Dynamotors and Rotary Converters. Incandescent Lamps. Arc Lamps. Substations. Management of Electrical Stations.

Only \$1 per month
\$6 for the Complete course
Send no money—
Just mail the coupon

McGraw-Hill Book Co., Inc.

Publishers of Books for Machinists Since 1876

239 W. 39th Street, NEW YORK

Commercial Managers Power Plant Salesmen Dealers Jobbers Contractors are using this home study course in Practical Electricity

This is a convenient, clearly written home study course in practical electricity which will give you just the technical and practical information you need in the transaction of every-day business. The course is up to date in every particular and so plainly written, so free from technicalities, that the essential facts can be grasped instantly. It will be found very helpful as applied to every-day demands, for it explains fully those terms which are necessary to know in doing an electrical business of any kind.

Records of Actual Practice

Electricity is easily mastered if you have the right books. Naturally the more practical the application the better. If you have been looking for an electrical course that begins with **Practice** and ends with **Practice**—if you want the records of actual work—then Radcliffe's Home Study Course in Practical Electricity will satisfy you absolutely.

The Course contains 700 pages of questions and answers which form the foundation of a complete knowledge of commercial electricity.

Mr. W. H. Radcliffe, former electrical expert for the General Electric Company, has covered thoroughly that part of electricity which every electrical worker should know thoroughly.

We are so sure that the course will appeal to you when you examine it, that we will agree to send the set to every reader of Practical Electricity, who will sign and mail the coupon below, for a free ten-day examination. See for yourself how plainly the facts about modern electrical practice are brought out. The library may be returned at our expense if you do not wish to keep it. If you are satisfied, merely send us \$1 per month for six months.

Why not mail the coupon today?

FREE EXAMINATION COUPON

McGRAW-HILL BOOK COMPANY, INC.,
239 West 39th Street, New York.

Gentlemen: Send me, transportation charges prepaid, for free inspection, the Home Study Course in Practical Electricity. If satisfactory I will send \$1 in ten days and \$1 per month until I have paid the price of the books, \$6. If not wanted I will write for shipping instructions, and I am to be put to no expense.

Signature
Residence Address
City and State
Name of Employer
Reference
Address

E.M. 6-'17

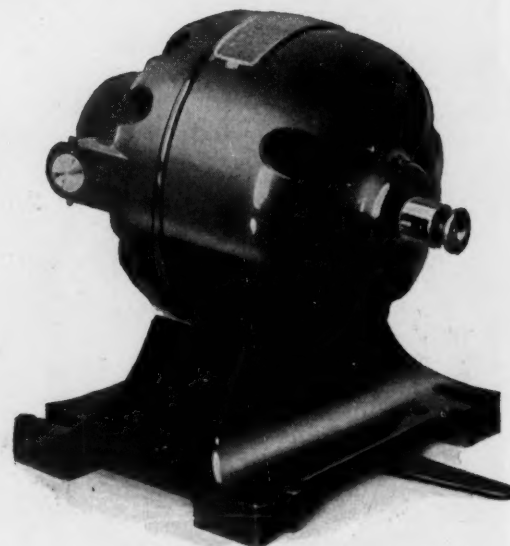
GILBERT TOY MOTORS

The Big \$15,000.00 Motor

The only die cast toy motor
on the market

NOTE THESE BIG FEATURES

1. FRAME, DIE CAST.
2. BATTERY WOUND.
3. STRENGTH; SURPRISINGLY POWERFUL.
4. SILENT AND SMOOTH RUNNING.
5. DIRECT SHAFT DRIVE.
6. HEAVY BASE WITH BOLT HOLES.
7. REVERSE SWITCH ATTACHMENT.
8. HEIGHT; $3\frac{7}{8}$ INCHES.



THE FEATURE MOTOR P-82
Price \$3.50—(Canada \$5.25)

THE BIG, STRONG MOTOR THAT DOES THE BUSINESS.

Other Motors of the Gilbert Line

P-73 Generator
Price \$4.50 (Canada \$6.75)

P-58 Motor
Price \$1.50 (Canada \$2.25)

P-56-C Motor
Price \$5.00 (Canada \$7.50)

P-56-B Motor
Price \$3.00 (Canada \$4.50)

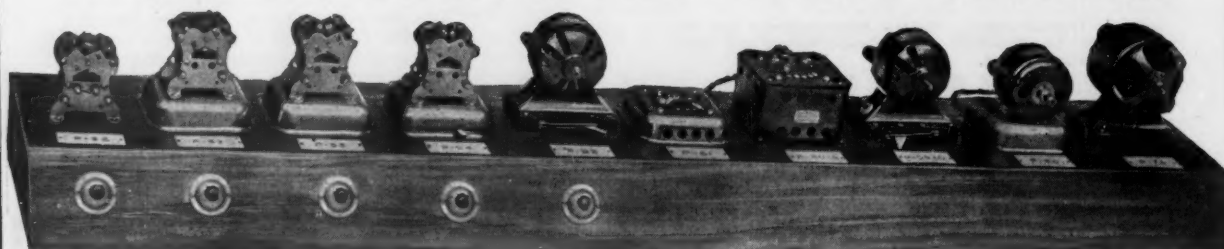
P-53 Motor
Price \$1.50 (Canada \$2.25)

P-52 Motor
Price \$1.00 (Canada \$1.50)

P-63 Multi-geared Motor
Price \$2.00 (Canada \$3.00)

P-54 Motor
Price \$2.00 (Canada \$3.00)

WE ALSO MAKE REVERSE SWITCHES, CONTROL SWITCHES, AND TRANSFORMERS. THE BEST OF EVERYTHING IN ELECTRICAL TOYS.



FREE: This Display Board Sells the Goods and Goes to You (on Request) with All Orders for the Complete Line.

ORDER OF YOUR JOBBER OR DIRECT TODAY!

Write for Full Information.



The A-C Gilbert

430 BLATCHLEY AVE., NEW HAVEN, CONN., U. S. A.
Canadian Representative, Menzies & Co., Limited, Toronto, Ontario



A Simple, Complete System for Retail Stores

The Electrically Operated Cash Register

*Does fifteen necessary things in
three seconds.*

Simple to operate — saves
time.

Forces accuracy — gives quick
service.

The New National Cash Register Credit File

*Cuts out all bookkeeping of cus-
tomers' accounts.*

No blotter — no daybook — no
customers' ledger.

Every customer's account balanced
to the minute.

Stops leaks — satisfies customers — increases profits in stores.
Old cash registers taken in part payment.
Every retail merchant should write us for particulars.

The National Cash Register Company, Dayton, Ohio

Cut out the coupon below and mail it to us today

Dept. 84, National Cash Register Co., Dayton, Ohio

Please send me full particulars on

- ☐ latest model cash register.
☐ new N. C. R. Credit File.

Name _____

Address _____



The Shelton Phonograph Motor is protected by patents.

This FREE PHONOGRAPH

does the selling for you—makes the profit. We ship the Phonograph to you free on receipt of bona fide order for 15 Shelton Electric phonograph motors.

See how compactly the Shelton motor fits the machine. The tone quality obtained makes any phonograph a better one.

The motor requires no attendance and operates by a simple friction drive.

The Phonograph is of handsome mahogany finish with full 12" turntable. It measures 16" x 19" x 12" high—the 50 size.

Write now for special dealer's price for the 15 Shelton Electric Motors with the Demonstrating Phonograph.

**Sell
15
Motors**

SHELTON ELECTRIC CO.

30 East 42nd St., New York

1917 FANS OF MERIT

A-B Gyrofans and Oscillating Fans

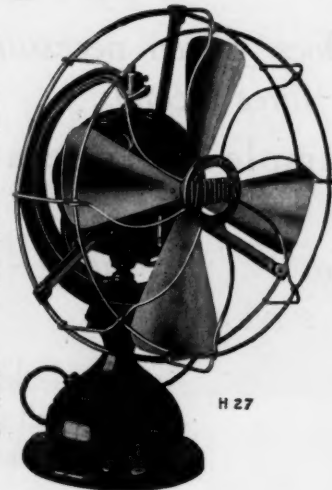


The A-B Gyrofan

is the original and successful — improved through years of service.

There are many places indeed where the A-B Gyrofan will give better all-around results than any other form of ventilation.

And the A-B Jandus oscillating fan has proved its worth in ruggedness and continued service.



H 27

*If you do not have A-B Bulletins, write. Order your fans now.
Have you ordered enough Abolites for industrial and protective lighting?*

The Adams-Bagnall Electric Co., Cleveland, Ohio

Manufacturers of
Electrical Apparatus with both
Merchandising and Engineering Merit

Industrial, Commercial and Street Lighting Equipment;
Lighting, Power and Constant-Current Transformers;
Gyrofans; Oscillating Fans; Auto Electrical Accessories

Write now for data or quotation on your requirements!

It's Easy to Sell Pittsburgh F. B.'s

IT'S easy, because the Pittsburgh F. B. has every feature that the housekeeper looks for, from the fourteen-inch nozzle to the switch in the handle.

Pittsburgh F. B. Cleaner

Examine it from top to bottom and you'll approve every feature—so will your customers. It will make your vacuum cleaner campaign a big success. Send today for literature.

Pittsburgh Fans

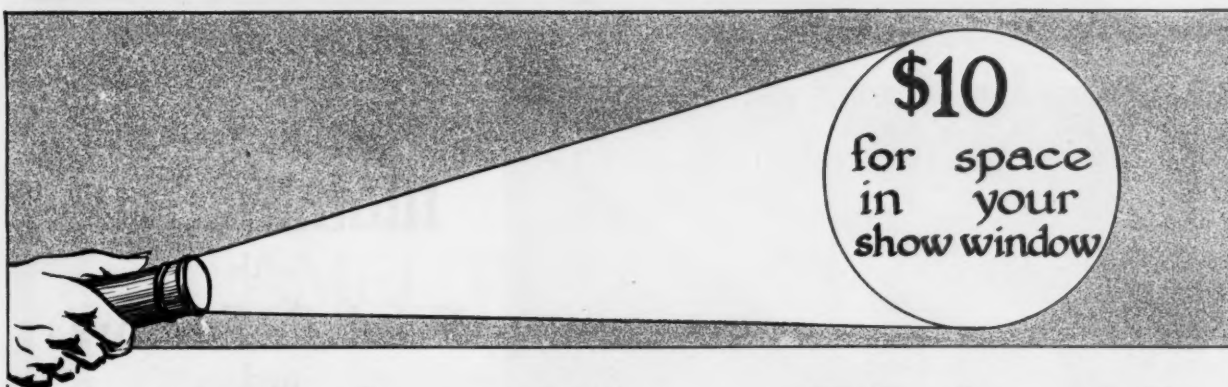
The fan season is on now and many dealers are glad they laid in a good stock of Pittsburgh "Sixes"—for the six inch fan is what most people prefer. The Pittsburgh "Six" is a little beauty and makes friends everywhere. If you haven't a supply, write today.

Pittsburgh Electric Specialties Co.
Pittsburgh, Pa.

Pacific Coast Distributors: United Trading Co., San Francisco



- ① Fourteen inch nozzle
- ② Revolving brush
- ③ Four large rollers
- ④ Aluminum, light and strong
- ⑤ Universal Motor
- ⑥ Large opening to receive dirt
- ⑦ Large air chamber
- ⑧ Large dust bag easily cleaned
- ⑨ Cord imbedded in handle
- ⑩ Switch in the handle



—and sales from which you will further profit

We have a sales plan whereby we can bring prospective customers for Franco Flashlights into your store. This includes an unusual window display. Sent free on request.

We have a flashlight with talking points which will make them buy Francos over any other.

We need your co-operation at the start, and we will pay for it. We will give \$10.00 list worth of our Radio Batteries free to any dealer using our window display service and ordering \$100.00 net worth before July 1st.

Get busy now and write for details of the plan—a thoroughly modern co-operative idea.

Interstate Electric Novelty Co., 104-114 So. 4th St., Brooklyn, N. Y.
CHICAGO—SAN FRANCISCO — TORONTO

Franco Flashlights



St. Paul M. E. Church, Atlantic City, N. J.

This large interior is effectively lighted with Equalite Fixtures, one 4 ft. and the other 6 ft. in diameter with side brackets to match. Recently installed by our Exclusive Agents for that city, L. L. Jones Co.

"EQUALITE"

**Its Value for
Large Interiors**

LARGE impressive interiors require lighting fixtures in keeping with the architectural proportions.

Equalite fixtures have practically no limitations as to size and general design—hence our leadership in this field.

Bayley & Sons, Inc.

Sales Dept.:
103 Park Avenue
New York City

Factory:
117 Vanderveer St.
Brooklyn, N. Y.



Show Case Illumination

with

**Frink Reflectors
and
Linolite Lamps**

Send for our new
Catalogue *No. 420*
it tells all about our

**Lighting Service
for Stores**

I. P. FRINK, Inc.

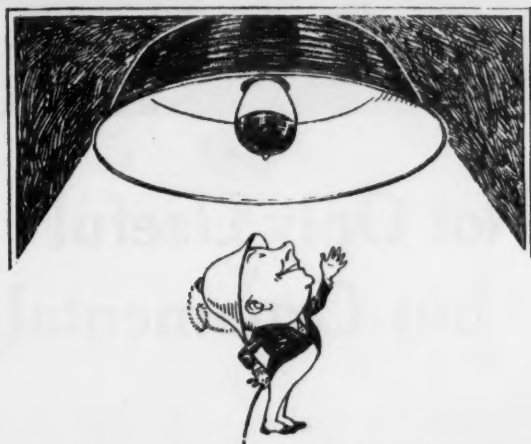
24TH ST. AND 10TH AVE., NEW YORK CITY

BOSTON, MASS.
55-61 High St.
CHICAGO, ILL.
175 W. Jackson Blvd.
CLEVELAND, OHIO
813 Superior Ave., N. W.
MONTREAL, QUE.
450-452 St. James St.

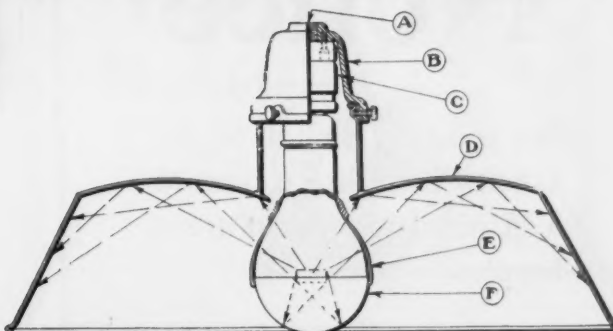
DETROIT, MICH.
72 Jefferson Ave.
PHILADELPHIA, PA.
210-212 No. Broad St.
PITTSBURGH, PA.
100-102 Wood St.
TORONTO, ONT.
19 Front St., East

ST. LOUIS, MO.
501-505 No. Third St.
SAN FRANCISCO, CAL.
Second and Howard Sts.
SEATTLE, WASH.
1020 First Ave., South
WINNIPEG, MAN.
385 Portage Ave.

*Let Us Help You Solve
Your Lighting Problems*



IVANHOE REFLECTO-CAP DIFFUSER



A metal cap, silver polished on the inside, fits snugly over a 200-watt MAZDA C lamp. The light is thrown back from this cap into the reflector, which directs the rays downward to the working-plane. The cap shields the filament from the eye, and the reflector diffuses the light so thoroughly as to cut out all glare, not only from the light source, but from polished surfaces in the room.

A, 1/2 inch tap; B, cast holder; C, porcelain socket; D, porcelain enameled reflector; E, wire spring holder for cap; F, internally polished silver cap.

The Reflecto-Cap Diffuser should be installed in industrial plants where it is absolutely essential to eliminate all glare. This new unit offers a splendid sales opportunity to the illuminating trade.

Write for prices and engineering data.

IVANHOE-REGENT WORKS

of General Electric Company

Cleveland, Ohio

For all Canadian business refer to Canadian General Electric Company, Limited, Toronto, Ontario

Daylighting for Profit

After the sun goes down, daylight still continues wherever there is an

"AMELITE"

The One Piece Store Light

fitted with the new Type C-2 Blue Glass Nitrogen Lamps. Consolidated Glassware alone reproduces daylight so accurately—it permits the exact matching of colors.

Every store needs the "Amelite." New business, sure sales, quick profits belong to the electrical merchants who act now.

Write or wire today for prices

14" Amelite, 6" Fitter.
11" Amelite, 6" Fitter.
7" Amelite, 3 1/4 or 4" Fitter
(Furnished with or without hole at bottom.)

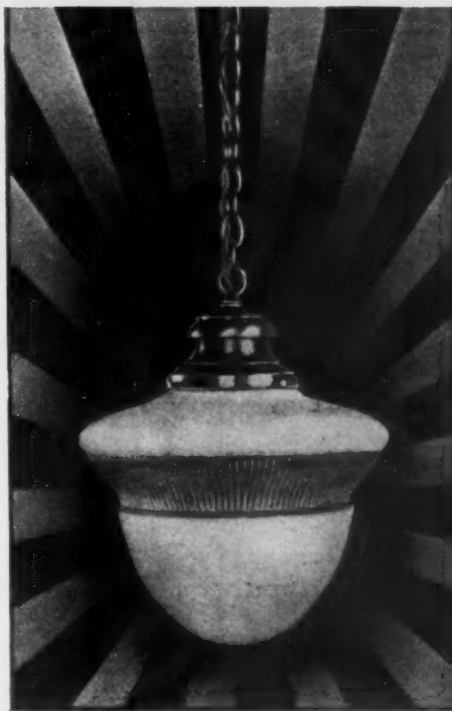
**Consolidated
Lamp & Glass Company**

CORAOPOLIS, PA.

NEW YORK, N. Y.
66 West Broadway

CHICAGO, ILL.
17 No. Wabash Ave.

Sales offices also in other principal cities



Notice

We thought enough of our 11812 Phenixlite to secure a United States Patent for it.

We think enough of our 11812 Phenixlite now to protect it to the fullest extent of the law.

We shall take immediate action against every dealer who installs, as well as the manufacturer who produces, a unit that infringes our patent.

We ask you, Mr. Dealer, if you believe in fair play to help us to protect your interests and ours.



PATENTED MARCH 6, 1917

The unit without a bad habit

The Phoenix Glass Co.

New York
Pittsburgh

Chicago
Boston

A Real Load Builder

Not Only Useful but Ornamental

The Uno-lite Reading Lamp is built for service, but attractiveness in design has not been sacrificed.

This makes it easy to sell to homes using electricity.

As a revenue producer it equals the electric iron and has a much better load factor.

The Uno-lite gives you the opportunity of placing a 100-watt Mazda C Lamp in every home and of making a good profit on every sale.

Our pamphlet "Loading Your Lines" tells how to do it. Send for it.

Specifications:

Height 19½ in.
Diameter of green dome 10 in.
Diameter of diffuser 6 in.
Length of base 7½ in.
Mazda C-2 (daylight lamp) recommended.

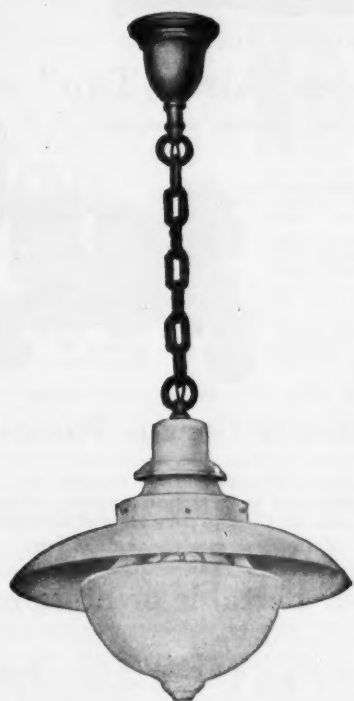
The Uno-lite Co. of America
Indianapolis, Ind.

The Uno-lite
Reading Lamp

\$5.00



The Unit of Day Brightness



The DENZAR—

utilizes all the light given off by the lamp,—

Projecting it into the working plane with the right intensity,—

With a somewhat subdued brightness which eliminates the eye-tiring glare,—

With no unsightly shadows on the ceiling, walls or floors.

This enclosed unit with no openings for the entrance of dirt, insects, with highly polished dust-resisting surfaces, stays clean longer and is easy to clean when necessary.

The DENZAR is a light you can confidently recommend to your customers. It is a business getter and a business builder. Let us send you the detailed information—now.

Beardslee Chandelier Mfg. Co.

222 S. Jefferson Street, Chicago



GREATER SATISFACTION—MORE SALES

Here is
Your
Market—



Has it occurred to you that through the women lies the best way to sell lamps to office, store and factory as well as to the home? Consider—

Women buy for their own homes *but they convert the husbands* who are buying for the business buildings. Sell them

FRANKLIN Mazda Lamps

and they in turn will demonstrate these Franklin Mazdas to their men more easily than you can. Follow up and you can win the new accounts.

For you can count on the Franklin Mazda making friends. Franklin Advertising interests new people constantly and Franklin Service keeps them happy. So sell to the women. Let them know what you can do. The profits follow.

The Franklin Electric Mfg. Co.

Hartford, Conn.

Remember—
The Name of Franklin
Helps You Sell.....





Wallace Adjustable Lamp

Retail Price \$3.00

Nearly Half a Million in Use

If you use a Wallace Lamp
you will naturally sell lots
of them.

Ask us how you can obtain
a Wallace Lamp free for
your own use, so you will
have Light Where You
Want It.

Made in Brass, Bronze or Nickel

A. C. PENN

Agent for

WATERBURY-WALLACE CO.

100 Lafayette St.,

New York City

MASTER Garage Pump

For Inflating Automobile Tires
Provides "Air on Tap"
at a moment's notice

That's what private
garage owners want—
that's what is neces-
sary in big public
garages.

Tires must be kept
properly inflated—up
to the prescribed pres-
sure. Car owners
won't wait. The air
must be "on Tap."

The Master Garage
Pump will properly in-
flate tires to the spec-
ific pressure very rap-
idly.

There is a Master Model designed for every garage requirement.



Model W
Portable

Master Garage Pumps

Use them ten days. They are guaranteed thus—

"We guarantee Master Garage Pumps for one year
against defects of material or workmanship. With
ordinary care and usage they should last ten years."

Note these models and send for
details of the complete line.

Either Portable or Stationary

Simple, compact, powerful, substantial. Designed to stand severe
service in Medium to Large Sized Public Garages.

Consists of a sturdy, efficient, two cylinder pump (bore 1 1/4",
stroke 2") driven by a 1/2 H.P. General Electric motor, mounted
on a neat metal truck. Running at normal speed (500 R.P.M.)
this machine will deliver three cubic feet of free air per minute
or will completely inflate a 37" x 5" tire from flat to 90 lbs. pres-
sure in less than 1 1/2 minutes.

The cut shows outfit mounted on a truck with wheels and handle,
but if preferred it can be mounted on a stationary base at the
same price, and where desired makes a very satisfactory outfit to
use in connection with a stationary tank installation.

Net price, complete, either portable or stationary type.

With regular alternating current motor.....\$125.00

With regular direct current motor..... 120.00

F.O.B. Hartford.

Model P—portable or stationary— For private and small public garages

Equipment is as shown by cut and includes 20 feet of air hose
with pressure gauge and 20 feet of lamp cord with plug.

1/2 H.P. General Electric Motors used.

There is no installation expense.

It is only necessary to connect the motor with any ordinary
electric light circuit by means of the lamp cord and plug which
are furnished. No tank is required and the pump delivers pure air
in a steady stream directly to the tires.

Completely inflates a 37 x 5 tire from flat to 90 lbs. in 2 1/2
minutes.

Net Price Complete

With regular alternating current motor.....\$70.00

With regular direct current motor..... 65.00



Master Model P
—Stationary

Model P—on truck portable—

For use in public garages and
large private garages this outfit
may be mounted on a neat metal
truck with wheels and handle.

Net Prices:

With regular alternating

current motor.....\$75.00

With regular direct current

motor..... 70.00

F.O.B. HARTFORD

The proposition covering the sale

of these pumps is alluring.

Model P—On truck, same spec-

ifications and power as Model P

stationary.

Regular A. C. Motor—\$75 F.O.B.

Regular D. C. Motor—\$70 Hart-

ford.

We will gladly supply you with literature. Complete details and
our special proposition to agents if you will write at once. Sell
these pumps on a 10-day trial. That never fails to clinch the sale.
They always prove their ability and necessity.

Master Garage Pumps Made and Guaranteed by

Hartford Machine Screw Co.

538 Capitol Avenue

Hartford, Conn.

Renew**Your Subscription****—and
Save****50%**

The subscription rate to Electrical Merchandising is \$2.00 a year. The get-acquainted rate has been \$1.00. The opportunity to

Subscribe at \$1 a year

ends July 1. Present subscribers who get their renewal orders into the mail by June 30 can extend their subscriptions a full year at one dollar.

By acting at once you can

**Make one Dollar
Do the work of TWO**

Mail the coupon immediately.

You never saved a dollar more easily nor got a bigger dollar's worth.

Your new year will start when your present year ends, but your order must come at once if you want to come in at half price.

You'll mail the coupon today?

Thank you.

**Maybe you're
not YET a Subscriber**

Then this is your last chance to become one for a single dollar.

After June 30 it will cost a pair of them. \$2.00 after June 30, \$1.00 now.

You'll mail the coupon today?

Thank you.



To Electrical Merchandising,
239 West 39th Street, New York.

Please {enter} my subscription to Electrical Merchandising at your half-price \$1.00 introductory rate which expires July 1st. (If you are now a subscriber your renewal will date from the expiration of your present subscription.)

Send to

Address

City State

My business is..... My position is.....

My employer's business is.....

Yearly subscription rates after July 1: \$2 Domestic;
\$2.50 Canadian; \$3 Foreign

Date.....1917



**A Few
New Numbers
from our
New Catalog
No. 20**

NOW READY

EVERY dealer and contractor can get a copy of this valuable catalog by writing to us for one on his business letterhead. Write to-day.

THIS book contains 400 illustrations of our best-selling Electric Lighting Fixtures (wide range of price). We consider this the best catalog the trade has even seen. Get your hands on a copy and see for yourself.

WRITE NOW

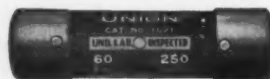
**SHAPIRO &
ARONSON**
20 Warren St.
NEW YORK



The Cost of Fuses is Slight

compared with the value of the apparatus they protect.

Is it safe to use any but those known to be dependable?



"Union" Fuses have stood the test of time. Approved by Underwriters' Label Service, well made, carefully tested.

Knife Blade sizes may be reloaded at factory, with large saving to user.

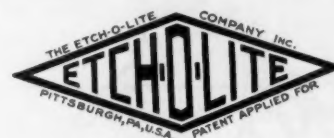
Write for Catalog No. 28.



Have You Tested Etch-O-Lite?

Do you know the advantages offered to the merchant—the jobber—the manufacturer—by this wonderful glass etching compound?

Etch-O-Lite is today replacing acid-etching and sand-blasting. It makes a dangerous, costly operation safe and cheap.



Every lamp frosted with Etch-O-Lite means a definite saving—and it allows both the merchant and jobber to carry a larger stock of clear lamps and make more money on his frosted lamp sales.

Put up in 2½, 5, 10 and 15 lb. containers. Order a quantity for test today.

Union Electric Company

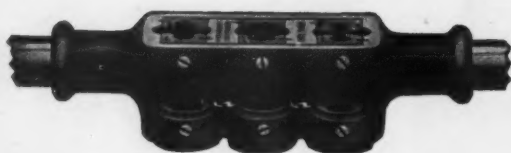
Sole Selling Agents

Pittsburgh, Pa.

Canadian Sales Agents

Northern Electric Company LIMITED

For Conduit Threading



The TRIO Die Stock

Save your time and patience by having all your dies in *one* stock. No loose dies or parts to hunt up and assemble.

The TRIO contains three cutting sizes of Little Giant pipe dies all adjusted ready to use.



Greenfield Tap and Die Corporation

Greenfield, Mass.

New York Chicago
Galt, Ont., Canada



Send for No. 37 Catalog
of Screw Cutting Tools

Mr. Dealer In arguments with customers you need Proof!



When disputes with customers arise over performance or fitness of electrical apparatus, *don't argue*—get the PROOF. Let us test the article. Our impartial and authoritative report

settles the matter—satisfies all—at small cost.

LET US UMPIRE YOUR DISPUTES

ELECTRICAL TESTING LABORATORIES

80th Street and East End Avenue, New York City

Don't forget—

to include in your advertising campaign

The Electrical Exposition
and Motor Show of 1917
October 10th to 20th inclusive

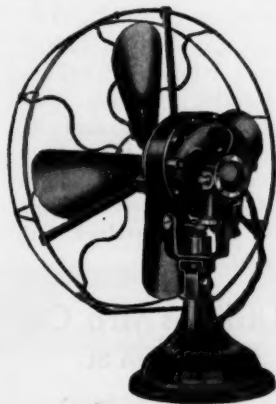
Mr. George F. Parker, Gen. Manager. Offices: 124 W. 42nd St.

A simple device conveniently located on the end bracket throws the oscillating mechanism on a

Century

Alternating Current Oscillating Fan

in and out of gear. The oscillating mechanism consists of steel worm with bronze pinions of exceptionally liberal dimensions, located in a grease filled gear case.



Literature and Prices
on Request

**Century Electric
Company**

19th, Pine to Olive Sts.
St. Louis, Mo., U. S. A.

Sales Offices
in Principal Cities

203

BRASCOLITE

DIFFUSION PLUS REFLECTION



Brascolites for Barracks

The unprecedented building activity of the Government presents a ready made field for Brascolite equipment. Good lighting equipment must be had quick.

Large stocks of Brascolites are carried by jobbers for immediate delivery.

Luminous Unit Co.
St. Louis, Mo.

New York
30 Church St.

San Francisco
639 Market St.

Chicago
19-S. 5th Ave.

Boston
223 Old South Bldg.

Philadelphia
1020 Land Title Bldg.

SILEX



Coffee Filter

The Silex is a remarkable all-round meal-time utility. Brews tea—boils milk and water—and makes cocoa—and the best-yeet coffee. With the aid of the combination Silex grid and toaster, it adds cereal-making, egg-cooking and toasting to its list of accomplishments.

It is built for 110 volts (direct or alternating current) — taking 4½ amperes. A robust, fool-proof device. All contacts, attachments and connections are approved by the National Board of Fire Underwriters. The Heating Unit is positively guaranteed.

Write for our dealer's proposition.

RETAILS AT \$12.00

The Silex Company
45 High St., Boston, Mass.

To Enlist

seems to be the theme of the day. We started out with this idea over fifty years ago and we are still enlisting

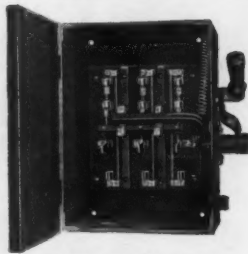
the public in our army of pleased patrons. When a customer becomes acquainted with the quality, price and general make-up of our Lighting Accessories he is more inclined to solicit recruits than desert.



**E. P. Gleason
Mfg. Co.**
37 Murray Street
New York City



"Circle T" Trumbull



30, 60, 100 Amp.
250 V., 500 V., A.C.,
1, 2, 3, 4 Pole

Externally Operated Motor Starting Switches

Box cannot be opened when Switch is in contact.

Switch can be locked in open position.

Handle to be held on no-fuse end until motor starts. When hand is removed, spring operated handle throws Switch into running contact. Box can not be opened until Switch is thrown off.

Quick Break prevents any danger of arc, no matter how slowly operator may open Switch.

Knockouts in each end.

WE ALSO HAVE A COMPLETE LINE OF
EXTERNALLY OPERATED SERVICE SWITCHES
See pages 72A and 72B, Catalogue 11.

The Trumbull Electric Mfg. Co.
Plainville, Conn.

New York Chicago San Francisco Boston Philadelphia



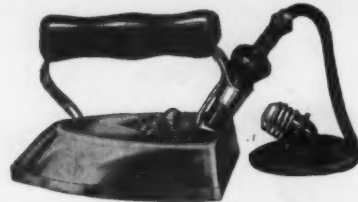
Dr. Dyno

is now visiting 10,000 users of direct-current customers of our jobbers—selling Seven in One, the commutator cleaner perfect. Each of his seven little assistants eliminates a trouble—Sparking, Firing, Heating, Cutting, Surface-shorts, Oil-shorts and the use of sand paper. He will be glad to include your customers. Write for our exclusive selling agency—a proven product with a good profit.

Dyno Utilities Mfg. Co.
608 S. Dearborn St.
CHICAGO

MAKE THE SEASONS WORK FOR YOU

It can be done by
Buying Seasonable Goods
With hot Weather upon us—the



AMERICAN BEAUTY ELECTRIC IRON *The Best Iron Made*

is the most seasonable of all devices. It has also the most profit making points beside the dealer helps that are furnished.

We make a varied line of electric household and industrial devices. May we send you an illustrated price list and discounts?

American Electrical Heater Company
Detroit, U. S. A.

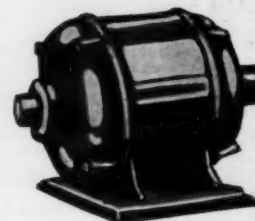
Oldest and Largest Makers in the World

GEM^{WIRE} CABLE GRIP

An essential for the wire man and a dollar saving line for you. The Gem patent grip never lets go and never destroys an inch of wire. Gem Grips are made in all sizes. Get our bulletin and open up this profitable line right away.

NORRIS ELEC. SPEC. Co., 38 Park Row, N. Y.

Ring up Spring 4971-4972



We've got a rebuilt Electric Motor for YOUR purpose.

We hold a complete stock from 1-50 H.P. both AC and DC.

American P. I. Co.
48 East 8th Street New York City

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FOR SALE

Stock Taking Time

Now is the time to turn the surplus stock of metals you have on hand into cash. We buy all grades of scrap metals, small lots as well as large lots. Write us today and tell us what you have and we will be pleased to quote you prices. National Metal & Rubber Company, 30-31 India Wharf, Boston, Mass.

\$ BUY AT A \$ BIG SAVING \$

One Westinghouse Direct Current Generator, 75 K.W., 125-250 Volts, 300 Ampere, 225 R.P.M., Serial No. 683770—connected to Russel Engine, complete with switchboard.

One Westinghouse Direct Current Generator, 40 K.W., 125-250 Volts, 160 Ampere, 325 R.P.M., Serial No. 681459—connected to Russel Engine, complete with switchboard.

For further particulars and prices write

**THE HOOVER SUCTION
SWEEPER COMPANY**
NEW BERLIN, OHIO

FOR SALE

Beware of the Junk Pile

The junk pile is the last resort—a little For Sale ad in this Searchlight Section should be the first and most profitable means of getting money for used equipment. An investment of \$1.50 may bring you some real returns. It has done this for others.

FOR SALE

At a Sacrifice

a quantity of

Small Electric Motors

125-130 hp., both a.c. and d.c., 110, 220-240 volts, standard makes. Address: Equipment Department, care of Treasurer, Underwood Typewriter Co., Underwood Building, New York City.

This advertisement

might be your own and get you the attention of other readers of Electrical Merchandising. They number over 12,000.

Have you anything to sell them?

AGENTS AND SALESMEN

Representative with New York Office

An experienced electrical engineer with commercial experience having New York office and foreign connections desires to represent a manufacturer of electrical devices in the East. Address E. A. Barth, Hudson Terminal Bldg., New York, N. Y.

POSITIONS VACANT

Correspondent and Advertising Man

Manufacturer of electric light specialties; vicinity of New York, has opening for young man experienced in electrical jobbing or sales. Mostly inside work, correspondence, printed matter and advertising. Salary \$2,500 to start. Every opportunity for advancement and permanent connection with sound, profitable and growing business. Married man preferred. All communications confidential. P., 57 (Pa.), Elec. Merchandising, 935 Real Estate Trust Bldg., Philadelphia.

Your Advancement

is largely in
your own hands—it is
doubtful if any
one else is worrying over it

Better positions are constantly being secured through small advertisements in the "Positions Wanted" Columns of *Electrical World*.

60 cents for 20 words

This is the Guide for the Buyer in the Market for Electrical Merchandise

Those concerns which advertise in Electrical Merchandising put their products in the Spot-light of Publicity and live up to the claims they make. They are listed below.

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Conduit, Flexible. Tubular Woven Fabric Co.	Lamps, Arc. Adams-Bagnall Electric Co. General Electric Co. Westinghouse El. & Mfg. Co.	Receptacles, Sign. Gleason Mfg. Co., E. P. Westinghouse El. & Mfg. Co.	Theater Dimmers. General Electric Co.
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Cooking Appliances, Electric. American Electrical Heater Co. General Electric Co. Hotpoint Elec. Heating Co. Landers, Frary & Clark. Silix Company. Western Electric Co. Westinghouse El. & Mfg. Co.	Lanterns, Battery. Interstate Electric Novelty Co.	Rheostats. General Electric Co. Westinghouse El. & Mfg. Co.	Transformers. Adams-Bagnall Electric Co. General Electric Co. Westinghouse El. & Mfg. Co.
Dictagraph. Anderson Elec. Corp., Carl.	Lighting Units. Beardslee Chandelier Mfg. Co. General Electric Co. Luminous Unit Co. Westinghouse El. & Mfg. Co.	Roller Chains. Chain Belt Co. Link-Belt Company.	Vacuum Cleaners, Electric. Hoover Suction Sweeper Co. Hotpoint Elec. Heating Co. Hurley Machine Co. Western Electric Co.
Fan Motors. Adams-Bagnall Electric Co. Century Electric Co. General Electric Co. Gilbert & Co., A. C. Robbins & Myers Co., The. Western Electric Co. Westinghouse El. & Mfg. Co.		Rosettes. Pass & Seymour, Inc.	Vibrators. Shelton Electric Co.
Fans, Exhaust and Ventilating. Adams-Bagnall Electric Co. Robbins & Myers Co., The. Westinghouse El. & Mfg. Co.		Searchlights, Electric Auto, Etc. Pittsburgh Electric Specialties Co.	Washing Machines, Electric. Home Specialty Mfg. Co. Hurley Machine Co. Western Electric Co.
Fixtures, Electric and Gas. Adams-Bagnall Electric Co. Beardslee Chandelier Mfg. Co. Benjamin Elec. Mfg. Co. Mitchell Vance Co. Penn. A. C. Pettingell-Andrews Company. Shapiro & Aronson.		Shade Holders. Adams-Bagnall Electric Co.	Wires and Cables. Electric Cable Co. General Electric Co. Western Electric Co.
Flashlights. Interstate Electric Novelty Co.		Shows, Electric. Electrical Exposition & Motor Show	Wiring Devices. General Electric Co.
			Wire, Grippers. Norris Electric Spec. Co.

Save This Issue Because—It is the intention of the publishers of *Electrical Merchandising* shortly to present a new form of index of unusual value to readers. To get full benefit from it, it will be necessary for you to save each issue.

Let the "Exemplar" Twins

put it across for you



TRADE MARK REG. U.S. PAT. OFF.

Bet-R-Light

13704
Center Plate, 12 inches diameter
Length, 36 inches over all
Old Brass Finish
12 Fixtures to Standard Package

\$1.40



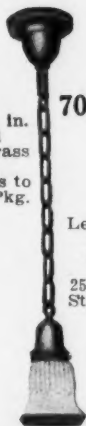
15802
Extension, 6 inches
Old Brass Finish
50 Fixtures to
Standard Package

29c



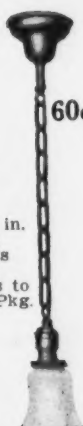
18399
Length, 24 in.
over all
Flemish Brass
Finish
12 Fixtures to
Standard Pkg.

70c



18398
Length, 36 in.
over all
Old Brass
Finish
25 Fixtures to
Standard Pkg.

60c



13705
Ceiling Plate,
12 inches diameter
Length, 12 inches
over all
Old Brass Finish
12 Fixtures to
Standard Package

\$1.05



13707
Ceiling Plate,
12 inches diameter
Length, 12 inches
over all
Flemish
Brass Finish
12 Fixtures to
Standard Package

\$1.40

Bet-R-Profit fixtures will sell them-
selves—SHOW them

Introduce them rapidly for big sales
and profits

Rising costs have hit the lower priced
fixtures hardest—because the propor-
tionate cost of brass to workmanship is
greatest in this class.

Science + Steel = Low Prices

We found the answer to rising
costs in the scientific use of steel in
fixture making, and put it across for
you to brush away all competition.

As a result we proudly offer Bet-
R-Profit fixtures—steel guaranteed—
perfectly finished in brush brass—a
perfect likeness—fully up to the
standard of brass for every practical
purpose of looks and wear.

The price difference is tremendous
—all in favor of Bet-R-Profit fix-
tures—while every practical require-
ment called for in this class of light-
ing fixture is fully met—for economy
—character—value—and utility.

Compare the prices of Bet-R-Profit
fixtures with what you are now pay-
ing. See the money they save. Judge
for yourself how they stimulate sales
and profits by defying competition.

There are three vital economic
reasons why Bet-R-Profit fixtures can

be sold to you at such low prices.

1. Manufactured in large quanti-
ties.

2. Sold only in standard package
cartons.

3. Economy in handling.
Prices quoted are for standard
package lots only and for unwired
fixtures without sockets, glassware
or any trimmings.

Special Offer—We make a SPE-
CIAL OFFER to break packages for
two weeks only—so that you may see
the wonderful value proposition we
are offering. The sample order will
prove to you that Bet-R-Profit fix-
tures are superior in quality and
finish to any fixtures of similar style
previously stocked by you.

After this offer is withdrawn 40
per cent additional will be charged
for broken package lots.

Get aboard for more and quicker profits.

Pettingell-Andrews Co.

On the Site of the Boston Tea Party,
BOSTON, MASS.



TRADE MARK REG. U.S. PAT. OFF.

Bet-R-Profit

13706
Center Plate, 12 inches diameter
Length, 36 inches over all
Flemish Brass Finish
6 Fixtures to Standard Package

\$2.25



15803
Extension, 6 inches
Flemish
Brass Finish
25 Fixtures to
Standard Package

50c



Get this new
CIRCULAR

Please send your
new Bet-R-Profit list
containing special
introductory offer to

Name

Address

Finish and Workmanship Guaranteed Satisfactory or Money Refunded

The Good Looks of the Robbins & Myers Fan are a Big Sales Help for the Dealer



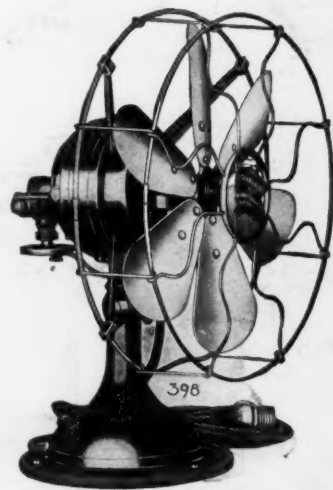
The class of people who are your best prospects for fan sales are accustomed to purchasing attractive furnishings for their homes. In buying a fan they naturally prefer one which will not be out of harmony with its surroundings. You'll find it a lot easier to sell them the shapely, handsomely finished Robbins & Myers Fan than another which has been built with less attention to the beauty of outline and finish.

You can easily test the public preference for an attractive looking fan by showing prospective purchasers a Robbins & Myers Fan and some other less attractive fan at the same time. Without further selling effort, just watch and see which fan gets the most attention.

The base and motor of The Robbins & Myers Fan are graceful in shape and the finish of the smooth drawn-steel frame and brass blades is applied as carefully as the finish of the finest piece of furniture.

In addition to the advantages they give the dealer, because of their beauty, guaranteed reliability and efficiency they offer the advantage of public acquaintance-ship. Ten years of persistent advertising in the leading magazines has made R. & M. Quality known to nearly everyone.

The appearance, performance and reputation of Robbins & Myers Fans all contribute to easy sales and good profits for the dealer.



THE ROBBINS & MYERS COMPANY, SPRINGFIELD, OHIO

New York Boston Philadelphia Buffalo Cleveland Cincinnati Chicago St. Louis San Francisco

Robbins & Myers Fans

Certain defects were observed in this volume when it was received by University Microfilms, Inc. Since we were unable to locate a perfect copy, this volume was filmed as received.

University Microfilms, Inc., Ann Arbor, Mich.